

<210> 1614  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1614  
 Met Ala Val Ala Val Leu Leu Cys Gly Cys Ile Val Ala Thr Val Ser  
           1                  5                  10                  15  
 Phe Phe Trp Glu Glu Ser Leu Thr Gln His Val Ala Gly Leu Leu Phe  
                   20                  25                  30  
 Leu Met Thr Gly Ile Phe Cys Thr Ile Ser Leu Cys Thr Tyr Ala Ala  
                   35                  40                  45  
 Ser Ile Ser Tyr Asp Leu Asn Arg Leu Pro Lys Leu Ile Tyr Ser Leu  
           50                  55                  60  
 Pro Ala Asp Val Glu His Gly Tyr Ser Trp Ser Ile Phe Cys Ala Trp  
           65                  70                  75                  80  
 Cys Ser Leu Gly Phe Ile Val Ala Ala Gly Gly Leu Cys Ile Ala Tyr  
                   85                  90                  95  
 Pro Phe Ile Ser Arg Thr Lys Ile Ala Gln Leu Lys Ser Gly Arg Asp  
                   100                  105                  110  
 Ser Thr Val  
           115

<210> 1615  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (88)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (119)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<220>  
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<220>  
 <221> SITE



<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1616

Ile Trp Ala Ile Asp Val Phe Ala Phe Cys Leu Ile Phe Phe Tyr Lys  
1 5 10 15

Xaa Xaa Val Arg Gly Ile His Leu Phe Ile Cys Cys Thr Asp Leu Ile  
20 25 30

Met Ile Leu Met Phe Glu Arg Leu His Leu Phe Ala Phe Thr Ile Cys  
35 40 45

Gly Val Lys Tyr Ile Phe Cys Ser Gln Tyr Met Lys Ile Trp Ser Asn  
50 55 60

Leu Asn Ser Lys Gln Thr Phe Cys Gly Cys Leu Phe Leu Tyr Trp Gln  
65 70 75 80

Ser Ile Asn

<210> 1617

<211> 182

<212> PRT

<213> Homo sapiens

<220>

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<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (151)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (154)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1617

Met Val Ile Tyr Val Thr Leu Ala Leu Trp Pro Gln Ile Ile Gln Lys  
1 5 10 15

Lys Ala Asn Gly Asn Cys Phe Trp His Phe Gly Leu Leu Leu Lys Leu  
20 25 30

[illegible]

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<210> 1618
<211> 95
<212> PRT
<213> Homo sapiens
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Met Arg Ser Gln His Ile Thr Trp Cys Leu Leu Phe Ser Ser Pro Leu  
1 5 10 15

Thr Val Ile Gly Ser Glu Lys Gln Ser Glu Cys Ser Leu Leu Arg Glu  
35 40 45

Leu Lys Gln His Pro Arg Trp Met Tyr Ser His Gln Glu Asp Leu Lys  
65 70 75 80

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<210> 1619
<211> 95
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[illegible][illegible][illegible][illegible][illegible][illegible]

**Table 1**

Parameter	Value
$\alpha_0$	0.001
$\beta_0$	0.001
$\gamma_0$	0.001
$\delta_0$	0.001
$\epsilon_0$	0.001
$\zeta_0$	0.001
$\eta_0$	0.001
$\theta_0$	0.001
$\phi_0$	0.001
$\chi_0$	0.001
$\psi_0$	0.001
$\omega_0$	0.001
$\nu_0$	0.001
$\mu_0$	0.001
$\lambda_0$	0.001
$\kappa_0$	0.001
$\iota_0$	0.001
$\jmath_0$	0.001
$\kappa_0$	0.001
$\lambda_0$	0.001
$\mu_0$	0.001
$\nu_0$	0.001
$\omega_0$	0.001
$\phi_0$	0.001
$\chi_0$	0.001
$\psi_0$	0.001
$\theta_0$	0.001
$\eta_0$	0.001
$\zeta_0$	0.001
$\epsilon_0$	0.001
$\delta_0$	0.001
$\gamma_0$	0.001
$\beta_0$	0.001
$\alpha_0$	0.001

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

**Table 1**

Parameter	Value
$\alpha_0$	0.001
$\beta_0$	0.001
$\gamma_0$	0.001
$\delta_0$	0.001
$\epsilon_0$	0.001
$\zeta_0$	0.001
$\eta_0$	0.001
$\theta_0$	0.001
$\phi_0$	0.001
$\chi_0$	0.001
$\psi_0$	0.001
$\omega_0$	0.001
$\nu_0$	0.001
$\mu_0$	0.001
$\lambda_0$	0.001
$\kappa_0$	0.001
$\iota_0$	0.001
$\jmath_0$	0.001
$\kappa_0$	0.001
$\lambda_0$	0.001
$\mu_0$	0.001
$\nu_0$	0.001
$\omega_0$	0.001
$\phi_0$	0.001
$\chi_0$	0.001
$\psi_0$	0.001
$\theta_0$	0.001
$\eta_0$	0.001
$\zeta_0$	0.001
$\epsilon_0$	0.001
$\delta_0$	0.001
$\gamma_0$	0.001
$\beta_0$	0.001
$\alpha_0$	0.001

[illegible][illegible][illegible][illegible]

Leu Gln Ile Ala Lys Lys Leu Ser Lys Gly Ile Arg Pro Val Leu Gly  
165 170 175

Gln Pro Glu Glu Val Gln Phe Arg Arg Leu Gln Ala Leu Met Met Glu  
180 185 190

Cys Trp Asp Thr Lys Pro Glu Lys Arg Pro Leu Ala Leu Ser Val Val  
195 200 205

Ser Gln Met Lys Asp Pro Thr Phe Ala Thr Phe Met Tyr Glu Leu Cys  
210 215 220

Cys Gly Lys Gln Thr Ala Phe Phe Ser Ser Gln Gly Gln Glu Tyr Thr  
225 230 235 240

Val Val Phe Trp Asp Gly Lys Glu Glu Ser Arg Asn Tyr Thr Val Val  
245 250 255

Asn Thr Glu Lys Gly Leu Met Glu Val Gln Arg Met Cys Cys Pro Gly  
260 265 270

Met Lys Val Ser Cys Gln Leu Gln Val Gln Arg Ser Leu Trp Thr Ala  
275 280 285

Thr Glu Asp Gln Lys Ile Tyr Ile Tyr Thr Leu Lys Gly Met Cys Pro  
290 295 300

Leu Asn Thr Pro Gln Gln Ala Leu Asp Thr Pro Ala Val Val Thr Cys  
305 310 315 320

Phe Leu Ala Val Pro Val Ile Lys Lys Asn Ser Tyr Leu Val Leu Ala  
325 330 335

Gly Leu Ala Asp Gly Leu Val Ala Val Phe Pro Val Val Arg Gly Thr  
340 345 350

Pro Lys Asp Ser Cys Ser Tyr Leu Cys Ser His Thr Ala Asn Arg Ser  
355 360 365

Lys Phe Ser Ile Ala Asp Glu Asp Ala Arg Gln Asn Pro Tyr Pro Val  
370 375 380

Lys Ala Met Glu Val Val Asn Ser Gly Ser Glu Val Trp Tyr Ser Asn  
385 390 395 400

Gly Pro Gly Leu Leu Val Ile Asp Cys Ala Ser Leu Glu Ile Cys Arg  
405 410 415

Arg Leu Glu Pro Tyr Met Ala Pro Ser Met Val Thr Ser Val Val Cys  
420 425 430

Ser Ser Glu Gly Arg Gly Glu Glu Val Val Trp Cys Leu Asp Asp Lys  
435 440 445

Ala Asn Ser Leu Val Met Tyr His Ser Thr Thr Tyr Gln Leu Cys Ala  
450 455 460

Arg Tyr Phe Cys Gly Val Pro Ser Pro Leu Arg Asp Met Phe Pro Val  
465 470 475 480

[illegible]

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<210> 1621
<211> 706
<212> PRT
<213> Homo sapiens
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1007

45

1008

355					360					365					
Lys	Phe	Ser	Ile	Ala	Asp	Glu	Asp	Ala	Arg	Gln	Asn	Pro	Tyr	Pro	Val
	370					375					380				
Lys	Ala	Met	Glu	Val	Val	Asn	Ser	Gly	Ser	Glu	Val	Trp	Tyr	Ser	Asn
385					390					395					400
Gly	Pro	Gly	Leu	Leu	Val	Ile	Asp	Cys	Ala	Ser	Leu	Glu	Ile	Cys	Arg
				405					410					415	
Arg	Leu	Glu	Pro	Tyr	Met	Ala	Pro	Ser	Met	Val	Thr	Ser	Val	Val	Cys
			420					425					430		
Ser	Ser	Glu	Gly	Arg	Gly	Glu	Glu	Val	Val	Trp	Cys	Leu	Asp	Asp	Lys
		435					440					445			
Ala	Asn	Ser	Leu	Val	Met	Tyr	His	Ser	Thr	Thr	Tyr	Gln	Leu	Cys	Ala
	450					455					460				
Arg	Tyr	Phe	Cys	Gly	Val	Pro	Ser	Pro	Leu	Arg	Asp	Met	Phe	Pro	Val
465					470					475					480
Arg	Pro	Leu	Asp	Thr	Glu	Pro	Pro	Ala	Ala	Ser	His	Thr	Ala	Asn	Pro
				485					490					495	
Lys	Val	Pro	Glu	Gly	Asp	Ser	Ile	Ala	Asp	Val	Ser	Ile	Met	Tyr	Ser
			500					505					510		
Glu	Glu	Leu	Gly	Thr	Gln	Ile	Leu	Ile	His	Gln	Glu	Ser	Leu	Thr	Asp
		515					520					525			
Tyr	Cys	Ser	Met	Ser	Ser	Tyr	Ser	Ser	Ser	Pro	Pro	Arg	Gln	Ala	Ala
	530					535					540				
Arg	Ser	Pro	Ser	Ser	Leu	Pro	Ser	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Val
545					550					555					560
Pro	Phe	Ser	Thr	Asp	Cys	Glu	Asp	Ser	Asp	Met	Leu	His	Thr	Pro	Gly
				565					570					575	
Ala	Ala	Ser	Asp	Arg	Ser	Glu	His	Asp	Leu	Thr	Pro	Met	Asp	Gly	Glu
			580					585					590		
Thr	Phe	Ser	Gln	His	Leu	Gln	Ala	Val	Lys	Ile	Leu	Ala	Val	Arg	Asp
		595					600					605			
Leu	Ile	Trp	Val	Pro	Arg	Arg	Gly	Gly	Asp	Val	Ile	Val	Ile	Gly	Leu
	610					615					620				
Glu	Lys	Asp	Ser	Gly	Ala	Gln	Arg	Gly	Arg	Val	Ile	Ala	Val	Leu	Lys
625					630					635					640
Ala	Arg	Glu	Leu	Thr	Pro	His	Gly	Val	Leu	Val	Asp	Ala	Ala	Val	Val
				645					650					655	
Ala	Lys	Asp	Thr	Val	Val	Cys	Thr	Phe	Glu	Asn	Glu	Asn	Thr	Glu	Trp
			660					665					670		
Cys	Leu	Ala	Val	Trp	Arg	Gly	Trp	Gly	Ala	Arg	Glu	Phe	Asp	Ile	Phe

675

680

685

Tyr Gln Ser Tyr Glu Glu Leu Gly Arg Leu Glu Ala Cys Thr Arg Lys  
 690 695 700

Arg Arg  
 705

&lt;210&gt; 1622

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (171)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (175)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (177)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (181)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (185)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (188)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (189)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (193)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1622

Met Ser Leu Leu Val Asp Gly Asp Met Asn Leu Ser Ile Ile Met Thr  
 1 5 10 15

Ile Ser Ser Thr Leu Leu Ala Leu Val Leu Met Pro Leu Cys Leu Trp

1010

09033245 "041201

0933245-0420

	20		25		30
Ile Tyr Ser Trp	Ala Trp	Ile Asn Thr	Pro Ile Val	Gln Leu Leu	Pro
35		40		45	
Leu Gly Thr Val	Thr Leu Thr	Leu Cys Ser	Thr Leu Ile	Pro Ile Gly	
50		55		60	
Leu Gly Val Phe	Ile Arg Tyr	Lys Tyr Ser	Arg Val Ala	Asp Tyr Ile	
65		70		75	80
Val Lys Val Ser	Leu Trp Ser	Leu Leu Val	Thr Leu Val	Val Leu Phe	
	85		90	95	
Ile Met Thr Gly	Thr Met Leu	Gly Pro Glu	Leu Leu Ala	Ser Ile Pro	
	100		105	110	
Ala Ala Val Tyr	Val Ile Ala	Ile Phe Met	Pro Leu Ala	Gly Tyr Ala	
	115		120	125	
Ser Gly Tyr Gly	Leu Ala Thr	Leu Phe His	Leu Pro Pro	Asn Cys Lys	
	130		135	140	
Arg Thr Val Cys	Leu Glu Thr	Gly Ser Gln	Asn Val Gln	Leu Cys Thr	
	145		150	155	160
Ala Ile Leu Lys	Leu Ala Phe	His Arg Ile	Xaa Arg Lys	His Xaa His	
	165		170	175	
Xaa Ser Phe Ala	Xaa Cys Thr	Phe Xaa Val	Cys Xaa Xaa	Gly Asp Phe	
	180		185	190	
Xaa Phe Asn Leu					
	195				
<210> 1623					
<211> 69					
<212> PRT					
<213> Homo sapiens					
<400> 1623					
Met Asp Phe	Asn Leu Gly	Leu Pro Gly	Ala Gly Pro	Pro Arg Leu	Leu
1		5		10	15
Arg Leu Gly	Leu Cys Val	Leu Ala Leu	Ala Cys Phe	Arg Cys Leu	Thr
	20		25		30
Gly Leu Phe	Leu Phe Met	Ala Trp Leu	His Ser Asp	Leu Gly Trp	Gly
	35		40		45
His Ile Gln	Pro Thr Ala	His Trp Leu	Ser Val Trp	Pro Ala Pro	Arg
	50		55		60
Phe Gln Pro	Gln Trp				
	65				

[illegible]



35

40

45

His Ile Gln Pro Thr Ala His Trp Leu Ser Val Trp Pro Ala Pro Arg  
 50 55 60

Phe Gln Pro Gln Trp  
 65

&lt;210&gt; 1626

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1626

Met Ala Arg Val Leu Gln Leu Glu Pro Gln Thr Ser Ala Cys Leu Leu  
 1 5 10 15

Ser Leu Leu Cys Pro Ala Leu Gln Glu Pro Gly Pro Ala Ser Gly Thr  
 20 25 30

Glu Ser Ala His Phe Leu Arg Ala His Ser Arg Cys Gly Pro Gly Leu  
 35 40 45

Pro Pro Pro His Val Ser Ser Pro Gln Pro Thr Pro Pro Gly Pro Glu  
 50 55 60

Ala Lys Val Arg Gly Cys Met Gly Ala Arg Trp Trp Leu Gly Arg Ala  
 65 70 75 80

Pro Gly Val Xaa Gly Val Phe Arg Asp Thr Thr  
 85 90

&lt;210&gt; 1627

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1627

Ala His Cys His Ile Ser Arg Ser His Cys Pro Thr Leu Arg Xaa Lys  
 1 5 10 15

Asp Thr Cys Gly Gly Trp Glu Pro Thr Ser Ala Leu Gly Ser Ser Thr  
20 25 30

Leu Ser His Val Pro His Xaa Leu Leu Glu Arg Arg Asp Leu Trp Arg  
35 40 45

Arg Glu Ala Glu Ala Arg Lys Gln Ser Gln Pro Asp Pro Ala Met Pro  
50 55 60

Pro Gly His Thr Arg Met Pro Glu Asn Gln Arg Leu Glu Thr Leu Thr  
65 70 75 80

Lys Leu Leu Gln Ser Gln Ser Gln Leu Leu Arg Glu Leu Val Leu Leu  
85 90 95

Pro Ala Gly Ala Asp Ser Leu Arg Ala Gln Ser His Arg Ala Glu Leu  
100 105 110

Asp Arg Lys Leu Val Gln Val Glu Glu Ala Ile Lys Ile Phe Ser Arg  
115 120 125

Pro Lys Val Phe Val Lys Met Asp Asp  
130 135

<210> 1628  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1628  
Met Ala Trp Ala Pro Ala Cys Val Gln Ala Gln Gly Leu Ser Cys Leu  
1 5 10 15

Cys Leu Phe Pro Asp Pro Ser Ser Cys Arg Glu Trp Cys Cys Pro Leu  
20 25 30

Gly Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu  
35 40 45

Lys Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Lys Ala  
50 55 60

Leu His Val Pro Pro Gln Asn Pro Arg Thr Gly Ser Leu Thr Phe Lys  
65 70 75 80

Lys Asp Glu Asn Glu Thr Lys Tyr Phe Leu Phe Phe Leu Leu Pro  
85 90 95

<210> 1629  
<211> 189  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (163)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1629

Val Gln Leu Ser Val Pro Ala Gly Met Leu His Ser Leu Cys Val Gln  
1 5 10 15

Leu Phe Ile Thr Ala Gly Ser Leu Cys Ala Thr His Ser Gln Cys Leu  
20 25 30

Ser Lys Ala Asp Gly Ala Arg Pro Ser Ile Leu Tyr Leu Thr Cys Pro  
35 40 45

Leu His Ser Pro Ile Lys Asn Gly Pro Gln Ile Arg Val Glu Glu Ala  
50 55 60

Asp Val Ser Ser Ser Glu Thr Ala Leu Pro Arg Ser Arg Arg Asp Gly  
65 70 75 80

Xaa Ala Lys Pro Gly Cys Glu Thr Gly Cys Cys Met Trp Leu Gln Ala  
85 90 95

Leu Asn Ile Val Thr Trp Arg Leu Pro Gln His Ile Val Arg Ser Lys  
100 105 110

Pro Gln Glu Pro Glu Gln Gln Asn Ser Cys His Pro Gln Lys Pro Ala  
115 120 125

Pro Gly Thr Ala Val Gln Ile Gly Arg Arg Ser Ser Gln Gln Trp Leu  
130 135 140

Leu Arg Thr Pro Leu Thr Gln Gln Arg Ser Pro Asp Ala Cys Arg Ser  
145 150 155 160

Pro Glu Xaa Ala Leu Ser Ala Leu Asp Met Ala Gly Asp Thr Gln Val  
165 170 175

Trp Pro Ser Gln Ser Leu Phe Ala Lys Leu Lys Val Lys  
180 185

<210> 1630

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1630

Met Ala Trp Ala Pro Ala Cys Val Gln Ala Gln Gly Leu Ser Cys Leu  
1 5 10 15

Cys Leu Phe Pro Asp Pro Ser Ser Cys Arg Glu Trp Cys Cys Pro Leu  
20 25 30

Gly Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu  
35 40 45



Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Leu

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala  
35 40 45

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp  
65 70 75 80

Arg Leu Arg Asp Val Ala Ala Leu Asn Gly Leu Tyr Arg Val Arg Ile  
100 105 110

Pro Arg Arg Pro Gly Ala Leu Asp Gly Leu Glu Ala Gly Gly Tyr Val  
115 120 125

Ser Ser Phe Val Pro Ala Cys Ser Leu Val Glu Ser His Leu Ser Asp  
130 135 140

Gln Leu Thr Leu His Val Asp Val Ala Gly Asn Val Val Gly Val Ser  
145 150 155 160

Val Val Thr His Pro Gly Gly Cys Arg Gly His Glu Val Glu Asp Val  
165 170 175

Asp Leu Glu Leu Phe Asn Thr Ser Val Gln Leu Gln Pro Pro Thr Thr  
180 185 190

Ala Pro Gly Pro Glu Thr Ala Ala Phe Ile Glu Arg Leu Glu Met Glu  
195 200 205

Gln Ala Gln Lys Ala Lys Asn Pro Gln Glu Gln Lys Ser Phe Phe Xaa  
210 215 220

Lys Tyr Trp Met Tyr Ile Ile Pro Val Val Leu Phe Leu Met Met Ser  
225 230 235 240

Gly Ala Pro Asp Xaa Gly Gly Gln Gly Xaa Gly Xaa Gly Gly Xaa Xaa  
245 250 255

Xaa Gly Val Val Ala Gly Glu Gly Pro Ser Leu Ser Ala Phe Pro Ser  
260 265 270

Cys Lys Thr Gln Gly Gly Phe Pro Phe Cys Leu Glu Phe Pro Xaa Cys  
275 280 285

Ser Ser Ser Pro Ser Pro Lys Lys Gly Phe Cys Leu Xaa Pro Leu  
290 295 300

<210> 1632  
 <211> 173  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (99)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (118)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (141)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (164)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (170)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (172)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (173)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1632  
 Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Leu  
     1                    5                    10                    15  
 Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala  
                     20                    25                    30  
 Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala  
             35                    40                    45  
 Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp  
     50                    55                    60  
 Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp  
     65                    70                    75                    80  
 Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly  
             85                    90                    95



[illegible]

Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala  
20 25 30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala  
35 40 45

Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp  
50 55 60

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp  
65 70 75 80

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly  
85 90 95

Arg Leu Arg Asp Val Ala Ala Ser Tyr Leu Asp Cys Gly Ala Thr Arg  
100 105 110

Ala Cys Gly Pro Leu Leu Cys Ala Thr Leu Pro Val Ser Leu Phe Lys  
115 120 125

Asn Ile Asp Asp Thr Leu Lys Cys Val Asn Val Leu Lys Ser Tyr Ser  
130 135 140

Phe Gln Gln Pro Lys Ala Thr Val Val Leu Ala Arg Arg Ser  
145                      150                      155

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1635

Met Arg Ser Arg Lys Ile Pro Gln Gln Ser Arg Phe Phe Thr Pro Leu  
1 5 10 15

Phe Phe Leu Asn Leu Pro Ile Leu Val Val Pro Leu Pro Ser Thr Asp  
20 25 30

Thr Ser Cys Ser Asp Phe Gln Tyr Gln Val Phe Lys Thr Ser Tyr Pro  
35 40 45

Pro Ser Ser Val Pro Pro Ser Leu Gln Ser His Lys His Trp Cys Ser  
50 55 60

Gln Ile Lys Ile Ser Pro Lys Gln Cys Gln Arg Asp Pro Leu Ser Ser  
65 70 75 80

Phe Gln Ala Arg Asp Met Phe Ser Phe Gln Val Leu Glu Lys Thr Gly  
85 90 95

Ser Met Phe Thr Trp Asn Phe Ser Arg Gly Gly Ala Ile Ser Phe Cys  
100 105 110

1020



Ile Lys Leu  
115

<210> 1636  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 1636  
Met Arg Ser Arg Lys Ile Pro Gln Gln Ser Arg Phe Phe Thr Pro Leu  
1 5 10 15  
Phe Phe Leu Asn Leu Pro Ile Leu Val Val Pro Leu Pro Ser Thr Asp  
20 25 30  
Thr Ser Cys Ser Asp Phe Gln Tyr Gln Val Phe Lys Thr Ser Tyr Pro  
35 40 45  
Pro Ser Ser Val Pro Pro Ser Leu Gln Ser His Lys His Trp Cys Ser  
50 55 60  
Gln Ile Lys Ile Ser Pro Lys Gln Cys Gln Arg Asp Pro Leu Ser Ser  
65 70 75 80  
Phe Gln Ala Arg Asp Met Phe Ser Phe Gln Val Leu Glu Lys Thr Gly  
85 90 95  
Ser Met Phe Thr Trp Asn Phe Ser Arg Gly Gly Ala Ile Ser Phe Cys  
100 105 110

Ile Lys Leu  
115

<210> 1637  
<211> 80  
<212> PRT  
<213> Homo sapiens

<400> 1637  
Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys  
1 5 10 15  
Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val  
20 25 30  
Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser  
35 40 45  
Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe  
50 55 60  
Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser  
65 70 75 80

<210> 1638  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 1638  
 Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys  
 1 5 10 15  
 Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val  
 20 25 30  
 Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser  
 35 40 45  
 Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe  
 50 55 60  
 Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser  
 65 70 75 80

<210> 1639  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 1639  
 Met Arg Thr Asn Gln Ser Leu Cys Ser Phe Leu Leu Trp Ser Val Pro  
 1 5 10 15  
 Phe His Gln Ala Ala Cys Pro Gln Ala Lys Asp His Pro Leu Glu Pro  
 20 25 30  
 Ser Met His Pro Glu Gly Thr Gln Leu Gln Ser Cys Ser Thr Met Leu  
 35 40 45  
 Gly Pro Arg Gln Leu Ser Ser Glu Lys Gln Pro Leu Leu Pro Pro Arg  
 50 55 60  
 Ser His Leu Lys Ser Ser Pro Met Leu Arg Ala Cys Lys Gly Leu Thr  
 65 70 75 80  
 Ser

<210> 1640  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 1640

Met Arg Thr Asn Gln Ser Leu Cys Ser Phe Leu Leu Trp Ser Val Pro  
1 5 10 15

Phe His Gln Ala Ala Cys Pro Gln Ala Lys Asp His Pro Leu Glu Pro  
20 25 30

Ser Met His Pro Glu Gly Thr Gln Leu Gln Ser Cys Ser Thr Met Leu  
35 40 45

Gly Pro Arg Gln Leu Ser Ser Glu Lys Gln Pro Leu Leu Pro Pro Arg  
50 55 60

Ser His Leu Lys Ser Ser Pro Met Leu Arg Ala Cys Lys Gly Leu Thr  
65 70 75 80

Ser

<210> 1641

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1641

Met Val Phe Leu Ser His Leu Phe Gly Thr Lys Arg Leu Phe Leu Leu  
1 5 10 15

Leu Ala Leu Ile Trp Ala Ser Trp His Phe Ser Tyr Met Pro Ala Asp  
20 25 30

Ala Trp Val Asp Pro Gly Ile Pro Asp Arg Tyr Leu Gln Ala Tyr Leu  
35 40 45

Ser Ile Val Xaa Pro  
50

<210> 1642

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1642

Met His Val Val His Trp Ser Arg Leu Phe Leu Leu Lys Pro Pro Tyr  
1 5 10 15

Ser Val His Ala Thr Phe Ile Pro Thr Gly Phe Leu Ala Arg Phe Arg  
20 25 30

Thr Pro Gly Ile Leu Asp Ser Cys Phe Phe His Ser Trp Pro Leu Leu



<211> 122  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (116)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1645  
 Met Gly Leu Leu Ala Phe Leu Lys Thr Gln Phe Val Leu His Leu Leu  
 1 5 10 15  
 Val Gly Phe Val Phe Val Val Ser Gly Leu Val Ile Asn Phe Val Gln  
 20 25 30  
 Leu Cys Thr Leu Ala Leu Trp Pro Val Ser Lys Gln Leu Tyr Arg Arg  
 35 40 45  
 Leu Asn Cys Arg Leu Ala Tyr Ser Leu Trp Ser Gln Leu Val Met Leu  
 50 55 60  
 Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe Thr Asp Gln Ala  
 65 70 75 80  
 Thr Val Glu Arg Phe Gly Lys Glu His Ala Ile Ile Ile Leu Asn His  
 85 90 95  
 Asn Phe Glu Ile Asp Phe Leu Cys Gly Trp Thr Met Cys Glu Arg Phe  
 100 105 110  
 Gly Met Leu Xaa Ser Ser Lys Gly Pro Arg  
 115 120

<210> 1646  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1646  
 Gly Asp Phe Leu Trp Lys Thr Ser Arg Val Asp Glu Lys Glu Ala Ala  
 1 5 10 15  
 Gln Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu Gln Glu Ile  
 20 25 30  
 Tyr Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys Pro Ala Arg  
 35 40 45  
 Arg Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala Thr Ile Leu Leu  
 50 55 60  
 Ser Pro Leu Phe Ser Phe Val Leu Gly Val Phe Ala Ser Gly Ser Pro  
 65 70 75 80  
 Leu Leu Ile Leu Thr Phe Leu Gly Phe Val Gly Ala Ala Ser Phe Gly  
 85 90 95





Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe  
35 40 45

Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala  
50 55 60

Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Xaa Arg Leu Cys Trp  
65 70 75 80

Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln  
85 90 95

Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Xaa  
100 105 110

Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg  
115 120 125

His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr  
130 135 140

Val Xaa Ala Tyr Thr Ala Gly Pro Tyr Val Cys Phe Phe Asn Pro Ala  
145 150 155 160

Leu Ala Ala Leu

<210> 1649  
<211> 186  
<212> PRT  
<213> Homo sapiens

<400> 1649  
Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro  
1 5 10 15

Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val  
20 25 30

Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe  
35 40 45

Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala  
50 55 60

Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Met Arg Leu Cys Trp  
65 70 75 80

Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln  
85 90 95

Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Leu  
100 105 110

Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg  
115 120 125

His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr





Figure 1 is a schematic representation of the experimental design. It shows a flow from 'Study 1' to 'Study 2'. Study 1 involves 'Pretest' and 'Main Study'. Study 2 involves 'Pretest' and 'Main Study'. The 'Main Study' in Study 2 is further divided into 'Control' and 'Intervention' groups. The 'Intervention' group is further divided into 'Intervention 1' and 'Intervention 2'.

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<220>  
<221> SITE  
<222> (52)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<210> 1652
<211> 464
<212> PRT
<213> Homo sapiens
```

1030

Phe Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln  
85 90 95

Arg Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp  
100 105 110

Leu Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr  
115 120 125

Ile Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His  
130 135 140

Pro Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala  
145 150 155 160

Trp Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln  
165 170 175

Asp Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro  
180 185 190

Pro Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr  
195 200 205

Lys Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser  
210 215 220

Leu Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg  
225 230 235 240

Thr Arg Ser Cys Gly Tyr Ala Cys Thr Ala Thr Glu Ser Arg Thr Cys  
245 250 255

Asp Arg Pro Asn Cys Pro Gly Ile Glu Asp Thr Phe Arg Thr Ala Ala  
260 265 270

Thr Glu Val Ser Leu Leu Ala Gly Ser Glu Glu Phe Asn Ala Thr Lys  
275 280 285

Leu Phe Glu Val Asp Thr Asp Ser Cys Glu Arg Trp Met Ser Cys Lys  
290 295 300

Ser Glu Phe Leu Lys Lys Tyr Met His Lys Val Met Asn Asp Leu Pro  
305 310 315 320

Ser Cys Pro Cys Ser Tyr Pro Thr Glu Val Ala Tyr Ser Thr Ala Asp  
325 330 335

Ile Phe Asp Arg Ile Lys Arg Lys Asp Phe Arg Trp Lys Asp Ala Ser  
340 345 350

Gly Pro Lys Glu Lys Leu Glu Ile Tyr Lys Pro Thr Ala Arg Tyr Cys  
355 360 365

Ile Arg Ser Met Leu Ser Leu Glu Ser Thr Thr Leu Ala Ala Gln His  
370 375 380

Cys Cys Tyr Gly Asp Asn Met Gln Leu Ile Thr Arg Gly Lys Gly Ala  
385 390 395 400

Gly Thr Pro Asn Leu Ile Ser Thr Glu Phe Ser Ala Glu Leu His Tyr  
405 410 415  
Lys Val Asp Val Leu Pro Trp Ile Ile Cys Lys Gly Asp Trp Ser Arg  
420 425 430  
Tyr Asn Glu Ala Arg Pro Pro Asn Asn Gly Gln Lys Cys Thr Glu Ser  
435 440 445  
Pro Ser Asp Glu Asp Tyr Ile Lys Gln Phe Gln Glu Ala Arg Glu Tyr  
450 455 460

<210> 1653  
<211> 158  
<212> PRT  
<213> Homo sapiens

<400> 1653  
Met Thr Thr Met Ala Pro Val Gly Leu Gln Thr Arg Ile Pro Trp Leu  
1 5 10 15  
Leu Cys Leu Gly Pro Pro Pro Gly Pro Cys Cys Pro Leu Ser Pro Thr  
20 25 30  
Ser Thr Leu Pro His Thr Pro Thr Ala Arg Ser Leu His Pro Thr Met  
35 40 45  
Ser Phe His Leu Thr Pro Met Val Gly Ala Val Pro Ala Ala Ser Ile  
50 55 60  
Val Arg Ala Ala Gly Ala Val Gly Arg His Gly Val Met Gly Gly Gln  
65 70 75 80  
Gly Ala Arg Gly Gly Pro Arg Ser Gly Pro Pro Ser Pro Ser Pro Ala  
85 90 95  
Val Ala Val Ser Leu Ser Pro Pro Ala Glu Gly Ala Ala Phe Gly Gly  
100 105 110  
Val Gly Lys Gln Val Gly Leu Ala Met Gly Ala Leu Leu His Pro Glu  
115 120 125  
Ala Gln Leu Gly Val Pro Leu Ile Ser Glu Pro Thr Gln Gly Ser Ile  
130 135 140  
Pro Met Asp Arg Pro Leu Ala Trp Pro Ser Pro Thr Thr Pro  
145 150 155

<210> 1654  
<211> 106  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SITE  
 <222> (26)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1654

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Pro Thr Phe Ser Asp Gln Tyr Leu Ala Pro His Pro Tyr Ser Pro Gln
 1           5           10           15

Pro Pro Pro Tyr His Glu Leu Pro His Xaa His Gly Gln Ser Gln Arg
      20           25           30

Val Leu Cys Gly Cys Tyr Val Ala His Cys Gly Ala Arg Leu Gly Arg
      35           40           45

Ala Leu Leu Val Cys Asp Trp Val Ser Trp Pro Ser Cys Ala Cys Ser
 50           55           60

Tyr Ser Ala Trp Ala Gln Pro Thr Ser Cys Cys His Thr Gly Asp Cys
 65           70           75           80

Gly His Cys Asp Ser His Gln Gln Cys Leu Val Pro Pro Pro Ser Leu
      85           90           95

Arg Gly Arg Gln Gly Thr Phe Asp Tyr Phe
      100           105
  
```

<210> 1655

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1655

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Met Thr Thr Met Ala Pro Val Gly Leu Gln Thr Arg Ile Pro Trp Leu
 1           5           10           15

Leu Cys Leu Gly Pro Pro Pro Gly Pro Cys Cys Pro Leu Ser Pro Thr
      20           25           30

Ser Thr Leu Pro His Thr Pro Thr Ala Arg Ser Leu His Pro Thr Met
      35           40           45

Ser Phe His Leu Thr Pro Met Val Gly Ala Val Pro Ala Ala Ser Ile
 50           55           60

Val Arg Ala Ala Gly Ala Val Gly Arg His Gly Val Met Gly Gly Gln
 65           70           75           80

Gly Ala Arg Gly Gly Pro Arg Ser Gly Pro Pro Ser Pro Ser Pro Ala
      85           90           95

Val Ala Val Ser Leu Ser Pro Pro Ala Glu Gly Ala Ala Phe Gly Gly
      100           105           110

Val Gly Lys Gln Val Gly Leu Ala Met Gly Ala Leu Leu His Pro Glu
      115           120           125

Ala Gln Leu Gly Val Pro Leu Ile Ser Glu Pro Thr Gln Gly Ser Ile
      133
  
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140

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<400> 1656
Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu
  1              5              10              15
Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Gly Lys
              20              25              30
Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg
              35              40              45
Val Ser Val Gly Leu Leu Leu Val Lys Arg Phe Leu Glu Gly Val Ile
  50              55              60
Tyr Glu
  65

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<400> 1657
Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu
  1              5              10              15

Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Gly Lys
              20              25              30

Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg
              35              40              45

Val Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly
  50              55              60

Asp Ser Trp Asp Val Lys Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu
  65              70              75              80

Val Thr Leu Gln Pro Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe
              85              90              95

Gln Ala Phe Leu Arg Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr
              100              105              110

Phe Tyr Phe Gly Lys Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser
              115              120              125

```



Leu Thr Arg Gly Pro Pro Ala Ser Ala Ser Gln Ser Thr Gly Ile Thr  
85 90 95  
Gly Val Ser His Pro Ala Trp Pro Arg Met Thr Phe Lys Arg Ser Asn  
100 105 110

<210> 1659  
<211> 122  
<212> PRT  
<213> Homo sapiens

<400> 1659  
Met Thr Thr Ala Ser Ser Leu Ile Ser Pro Phe Phe Pro Leu Pro Pro  
1 5 10 15  
Pro Ala His Phe Ser Gln Cys Arg Met Thr Phe Cys Leu Phe Val Leu  
20 25 30  
Phe Cys Leu Arg Trp Ser Leu Ala Leu Leu Pro Arg Val Glu Cys Ser  
35 40 45  
Gly Ala Ile Ser Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Gly  
50 55 60  
Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg His Ala Pro  
65 70 75 80  
Pro Cys Pro Asp Asn Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Leu  
85 90 95  
Cys Trp Pro Gly Trp Ser Arg Thr Pro Asp Leu Val Val His Pro Pro  
100 105 110  
Arg Pro Pro Lys Ala Leu Gly Leu Gln Ala  
115 120

<210> 1660  
<211> 65  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1660  
Met Cys Lys Gly Leu Lys Asn Pro Glu Gly Leu Leu Leu Leu Leu Leu  
1 5 10 15  
Leu Leu Leu Phe Thr Asp Thr Xaa Asn Ser His Cys Leu Pro Pro Tyr  
20 25 30







<220>  
 <221> SITE  
 <222> (71)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1663  
 Met Leu Ala Ala Ala Pro Leu His Glu Gln Lys Gln Met Ile Gly Thr  
           1                  5                  10                  15  
 Cys Tyr Leu Val Leu Lys Arg Trp Ser Asp Trp Met Val Leu Ser Phe  
                   20                  25                  30  
 Leu Pro Leu Leu Leu Ser Cys Asp Phe Glu Gly Ser Val Ser Thr Pro  
                   35                  40                  45  
 Leu Ser Met Met Ser Thr Pro Ser Trp Leu Ala Arg Ser Arg Ala Cys  
           50                  55                  60  
 Cys Trp Arg Leu Thr Thr Xaa Ser Cys Cys Ser Cys Trp Ser Leu Gln  
           65                  70                  75                  80  
 Asn Pro Ser Met Pro Arg  
                   85

<210> 1664  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (71)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1664  
 Met Leu Ala Ala Ala Pro Leu His Glu Gln Lys Gln Met Ile Gly Thr  
           1                  5                  10                  15  
 Cys Tyr Leu Val Leu Lys Arg Trp Ser Asp Trp Met Val Leu Ser Phe  
                   20                  25                  30  
 Leu Pro Leu Leu Leu Ser Cys Asp Phe Glu Gly Ser Val Ser Thr Pro  
                   35                  40                  45  
 Leu Ser Met Met Ser Thr Pro Ser Trp Leu Ala Arg Ser Arg Ala Cys  
           50                  55                  60  
 Cys Trp Arg Leu Thr Thr Xaa Ser Cys Cys Ser Cys Trp Ser Leu Gln  
           65                  70                  75                  80  
 Asn Pro Ser Met Pro Arg  
                   85

<210> 1665  
 <211> 49  
 <212> PRT

<213> Homo sapiens

<400> 1665

Met Lys His Ser Phe Leu Ser Ser Asp Leu Ile Trp Cys Val Leu Ser  
1 5 10 15

Leu Leu Cys Leu Gly Val Trp Phe Arg Glu Thr Trp Thr Thr Leu Phe  
20 25 30

Gly Arg Thr Gly Leu Pro Arg Asn Gln Gln Cys Pro Arg Arg Lys Gly  
35 40 45

Leu

<210> 1666

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1666

Met Lys His Ser Phe Leu Ser Ser Asp Leu Ile Trp Cys Val Leu Ser  
1 5 10 15

Leu Leu Cys Leu Gly Val Trp Phe Arg Glu Thr Trp Thr Thr Leu Phe  
20 25 30

Gly Arg Thr Gly Leu Pro Arg Asn Gln Gln Cys Pro Arg Arg Lys Gly  
35 40 45

Leu

<210> 1667

<211> 142

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1667

Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys  
1 5 10 15

Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val  
20 25 30

Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly  
35 40 45

Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val  
50 55 60

His Asn Phe Gln Xaa Arg Pro Pro Ser Gly Arg Xaa Leu Ser Pro Gln  
65 70 75 80

Ser Ala Tyr Pro Arg Leu Pro Gly Pro Xaa Phe Pro His Leu His Asn  
85 90 95

Gly Gly Asp His Pro Cys Pro Ala Gly Cys Arg Xaa Gly Cys Glu Ser  
100 105 110

Ser Ala Trp Met Gln Pro Gly Gly Ser His Arg Ala Ala Phe Thr Gly  
115 120 125

Leu Ala Leu Pro Trp Ala Gly Gly Arg Pro His Pro Lys Arg  
130 135 140

<210> 1668

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1668

Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys  
1 5 10 15

Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val  
20 25 30

Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly  
35 40 45

Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val  
50 55 60

His Asn Phe Gln Ser Arg Pro Pro Ser Gly Arg Arg Leu Ser Pro Gln  
65 70 75 80

Ser Ala Tyr Pro Arg Leu Pro Gly Pro Gln Phe Pro His Leu His Asn  
85 90 95

Gly Gly Asp His Pro Cys Pro Ala Gly Cys Gln Glu Arg Leu  
100 105 110

<210> 1669  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1669  
 Met Ala Gly Pro Gly Trp Thr Leu Leu Leu Leu Leu Leu Leu Leu  
 1 5 10 15  
 Leu Leu Gly Ser Met Ala Gly Tyr Gly Pro Gln Lys Lys Leu Asn Leu  
 20 25 30  
 Ser His Lys Gly Ile Gly Glu Pro Cys Gly Arg His Glu Glu Cys Gln  
 35 40 45  
 Ser Asn Cys Cys Thr Ile Asn Ser Leu Ala Pro His Thr Leu Cys Thr  
 50 55 60  
 Pro Lys Thr Ile Phe Leu Gln Cys Leu Pro Trp Arg Lys Pro Asn Gly  
 65 70 75 80  
 Tyr Arg Cys Ser His Asp Ser Glu Cys Gln Ser Ser Cys Cys Val Arg  
 85 90 95  
 Asn Asn Ser Pro Gln Glu Leu Cys Thr Pro Gln Ser Val Phe Leu Gln  
 100 105 110  
 Cys Val Pro Trp Arg Lys Pro Asn Gly Asp Phe Cys Ser Ser His Gln  
 115 120 125  
 Glu Cys His Ser Gln Cys Cys Ile Gln Leu Arg Glu Tyr Ser Pro Phe  
 130 135 140  
 Arg Cys Ile Pro Arg Thr Gly Ile Leu Ala Gln Cys Leu Pro Leu  
 145 150 155

<210> 1670  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1670  
 Met Arg Trp Pro Cys Pro Thr Ser Lys Pro Ala Pro Pro Pro Val Leu  
 1 5 10 15  
 Trp Ser His Leu Cys Gln His Arg Trp Gly Leu Thr Pro Ala Ser Thr  
 20 25 30  
 Leu Leu Cys Trp Leu Leu Leu Phe Asn Leu Gly Thr Cys Leu Ser Phe  
 35 40 45  
 Ser His Leu Lys Gln Asn Asn Asn Asn Ser Asn Thr Ser Lys Ile Ser  
 50 55 60  
 Phe Asp Pro Ala Ser Leu Cys Trp Val Ile Ile Ser Leu Ser Phe Pro  
 65 70 75 80



	245		250		255
Gly Pro Phe Ser Thr Gly Gln Glu Ser Pro Thr Ala Glu Asn Ala Arg					
	260		265		270
Leu Leu Ala Gln Lys Arg Gly Ala Leu Gln Gly Ser Ala Trp Gln Val					
	275		280		285
Ser Ser Glu Asp Val Arg Trp Asp Thr Phe Pro Leu Gly Arg Met Pro					
	290		295		300
Gly Gln Thr Glu Asp Pro Ala Glu Leu Met Leu Glu Asn Tyr Asp Thr					
	305		310		315
Met Tyr Leu Leu Asp Gln Pro Val Leu Glu Gln Arg Leu Glu Pro Ser					
	325		330		335
Thr Cys Lys Thr Asp Thr Leu Gly Leu Ser Cys Gly Val Gly Ser Gly					
	340		345		350
Asn Cys Ser Asn Ser Ser Ser Ser Asn Phe Glu Gly Leu Leu Trp Ser					
	355		360		365
Gln Gly Gln Leu His Gly Leu Lys Thr Gly Leu Gln Leu Phe					
	370		375		380

<210> 1672  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1672
Met Arg Trp Pro Cys Pro Thr Ser Lys Pro Ala Pro Pro Pro Val Leu
1 5 10 15
Trp Ser His Leu Cys Gln His Arg Trp Gly Leu Thr Pro Ala Ser Thr
20 25 30
Leu Leu Cys Trp Leu Leu Leu Phe Asn Leu Gly Thr Cys Leu Ser Phe
35 40 45
Ser His Leu Lys Gln Asn Asn Asn Ser Asn Thr Ser Lys Ile Ser
50 55 60
Phe Asp Pro Ala Ser Leu Cys Trp Val Ile Ile Ser Leu Ser Phe Pro
65 70 75 80
Pro Phe Pro Ser Lys His Leu Lys Arg Val Val Tyr Thr Gln His Ser
85 90 95
Pro Phe Pro His Tyr Pro Leu Thr Pro Gln Pro Ala Ala Ile
100 105 110

<210> 1673  
 <211> 156  
 <212> PRT



<213> Homo sapiens

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1673

Met Leu Gln Gly His Ser Ser Val Phe Gln Ala Leu Leu Gly Thr Phe  
1 5 10 15

Phe Thr Trp Gly Met Thr Ala Ala Gly Ala Ala Leu Val Phe Val Phe  
20 25 30

Ser Ser Gly Gln Arg Arg Ile Leu Asp Gly Ser Leu Gly Phe Ala Ala  
35 40 45

Gly Val Met Leu Ala Ala Ser Tyr Trp Ser Leu Leu Ala Pro Ala Val  
50 55 60

Glu Met Ala Thr Ser Ser Gly Gly Phe Gly Ala Phe Ala Phe Phe Pro  
65 70 75 80

Val Ala Val Gly Phe Thr Leu Gly Ala Ala Phe Xaa Tyr Leu Ala Asp  
85 90 95

Leu Leu Met Pro His Leu Gly Ala Ala Glu Asp Pro Gln Thr Ala Leu  
100 105 110

Ala Xaa Asn Phe Gly Ser Thr Leu Met Xaa Lys Lys Ser Asp Pro Glu  
115 120 125

Gly Pro Ala Leu Leu Xaa Pro Glu Ser Glu Leu Phe Ile Arg Ile Gly  
130 135 140

Arg Leu Ala Ser Phe Ser Ser Ser Leu Leu Gln His  
145 150 155

<210> 1674

<211> 167

<212> PRT

<213> Homo sapiens

Met Leu Gln Gly His Ser Ser Val Phe Gln Ala Leu Leu Gly Thr Phe  
1 5 10 15

Phe Thr Trp Gly Met Thr Ala Ala Gly Ala Ala Leu Val Phe Val Phe  
20 25 30

Ser Ser Gly Gln Arg Arg Ile Leu Asp Gly Ser Leu Gly Phe Ala Ala  
 . 35 40 45

Gly Val Met Leu Ala Ala Ser Tyr Trp Ser Leu Leu Ala Pro Ala Val  
50 55 60

Glu Met Ala Thr Ser Ser Gly Gly Phe Gly Ala Phe Ala Phe Phe Pro  
65 70 75 80

Val Ala Val Gly Phe Thr Leu Gly Ala Ala Phe Val Tyr Leu Ala Asp  
85 90 95

Leu Leu Met Pro His Leu Gly Ala Ala Glu Asp Pro Gln Thr Ala Leu  
100 105 110

Ala Leu Asn Phe Gly Ser Thr Leu Met Lys Lys Lys Ser Asp Pro Glu  
115 120 125

Gly His Ala Leu Leu Phe Pro Glu Arg Ile His Xaa Ile Asp Lys Ser  
130 135 140

Glu Asn Gly Glu Ala Tyr Gln Arg Lys Lys Ala Ala Ala Thr Gly Leu  
145 150 155 160

Pro Glu Gly Pro Ala Val Pro  
165

<211> 204

<213> Hom

Met Phe Gln Phe Leu Ser Gln Gly Phe Tyr Cys Gly Val Gly Leu Phe  
1 5 10 15

Thr Arg Phe Leu Lys Leu Leu Gly Ala Leu Leu Leu Leu Ala Leu Ala  
20 25 30

Leu Phe Leu Gly Phe Leu Gln Leu Gly Trp Arg Phe Leu Val Gly Leu  
35 40 45

Gly Asp Arg Leu Gly Trp Arg Asp Lys Ala Thr Trp Leu Phe Ser Trp  
50 55 60

Leu Asp Ser Pro Ala Leu Gln Arg Cys Leu Thr Leu Leu Arg Asp Ser

65		70		75		80
Arg Pro Trp Gln Arg Leu Val Arg Ile Val Gln Trp Gly Trp Leu Glu						
	85			90		95
Leu Pro Trp Val Lys Gln Asn Ile Asn Arg Gln Gly Asn Ala Pro Val						
	100		105		110	
Ala Ser Gly Arg Tyr Cys Gln Pro Glu Glu Glu Val Ala Arg Leu Leu						
	115		120		125	
Thr Met Ala Gly Val Pro Glu Asp Glu Leu Asn Pro Phe His Val Leu						
	130		135		140	
Gly Val Glu Ala Thr Ala Ser Asp Val Glu Leu Lys Lys Ala Tyr Arg						
	145		150		155	160
Gln Leu Ala Val Met Val His Pro Asp Lys Asn His His Pro Arg Ala						
	165		170			175
Glu Glu Ala Phe Lys Val Phe Ala Ser Ser Leu Gly Thr Leu Ser Ala						
	180		185			190
Met Leu Lys Lys Arg Lys Gly Val Trp Arg Leu Lys						
	195		200			

<210> 1676  
 <211> 412  
 <212> PRT  
 <213> Homo sapiens

<400> 1676  
 Met Gly Val Trp Thr Gly Arg Leu Gly Gly Trp Ala Gln Val Met Phe  
 1 5 10 15  
 Gln Phe Leu Ser Gln Gly Phe Tyr Cys Gly Val Gly Leu Phe Thr Arg  
 20 25 30  
 Phe Leu Lys Leu Leu Gly Ala Leu Leu Leu Ala Leu Ala Leu Phe  
 35 40 45  
 Leu Gly Phe Leu Gln Leu Gly Trp Arg Phe Leu Val Gly Leu Gly Asp  
 50 55 60  
 Arg Leu Gly Trp Arg Asp Lys Ala Thr Trp Leu Phe Ser Trp Leu Asp  
 65 70 75 80  
 Ser Pro Ala Leu Gln Arg Cys Leu Thr Leu Leu Arg Asp Ser Arg Pro  
 85 90 95  
 Trp Gln Arg Leu Val Arg Ile Val Gln Trp Gly Trp Leu Glu Leu Pro  
 100 105 110  
 Trp Val Lys Gln Asn Ile Asn Arg Gln Gly Asn Ala Pro Val Ala Ser  
 115 120 125  
 Gly Arg Tyr Cys Gln Pro Glu Glu Glu Val Ala Arg Leu Leu Thr Met  
 130 135 140

Ala Gly Val Pro Glu Asp Glu Leu Asn Pro Phe His Val Leu Gly Val  
145 150 155 160

Glu Ala Thr Ala Ser Asp Val Glu Leu Lys Lys Ala Tyr Arg Gln Leu  
165 170 175

Ala Val Met Val His Pro Asp Lys Asn His His Pro Arg Ala Glu Glu  
180 185 190

Ala Phe Lys Val Leu Arg Ala Ala Trp Asp Ile Val Ser Asn Ala Glu  
195 200 205

Lys Arg Lys Glu Tyr Glu Met Lys Arg Met Ala Glu Asn Glu Leu Ser  
210 215 220

Arg Ser Val Asn Glu Phe Leu Ser Lys Leu Gln Asp Asp Leu Lys Glu  
225 230 235 240

Ala Met Asn Thr Met Met Cys Ser Arg Cys Gln Gly Lys His Arg Arg  
245 250 255

Phe Glu Met Asp Arg Glu Pro Lys Ser Ala Arg Tyr Cys Ala Glu Cys  
260 265 270

Asn Arg Leu His Pro Ala Glu Glu Gly Asp Phe Trp Ala Glu Ser Ser  
275 280 285

Met Leu Gly Leu Lys Ile Thr Tyr Phe Ala Leu Met Asp Gly Lys Val  
290 295 300

Tyr Asp Ile Thr Gln Trp Ala Gly Cys Gln Arg Val Gly Ile Ser Pro  
305 310 315 320

Asp Thr His Arg Val Pro Tyr His Ile Ser Phe Gly Ser Arg Ile Pro  
325 330 335

Gly Thr Arg Gly Arg Gln Arg Ala Thr Pro Asp Ala Pro Pro Ala Asp  
340 345 350

Leu Gln Asp Phe Leu Ser Arg Ile Phe Gln Val Pro Pro Gly Gln Met  
355 360 365

Pro Asn Gly Asn Phe Phe Ala Ala Pro Gln Pro Ala Pro Gly Ala Ala  
370 375 380

Ala Ala Ser Lys Pro Asn Ser Thr Val Pro Lys Gly Glu Ala Lys Pro  
385 390 395 400

Lys Arg Arg Lys Lys Val Arg Arg Pro Phe Gln Arg  
405 410

<210> 1677

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE  
 <222> (119)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1677

Met	Ala	Leu	Phe	Arg	Cys	Val	Trp	Ser	Val	Leu	Ser	Ala	Leu	Gly	Lys
1				5					10					15	
Ser	Gly	Ser	Asp	Leu	Cys	Ala	Gly	Cys	Gly	Ser	Arg	Leu	Arg	Ser	Pro
			20					25					30		
Phe	Ser	Phe	Ala	Tyr	Val	Pro	Arg	Cys	Phe	Ser	Ser	Thr	Ala	Asn	Ser
			35				40						45		
Tyr	Pro	Lys	Lys	Pro	Leu	Thr	Ser	Tyr	Val	Arg	Phe	Ser	Lys	Glu	Gln
	50					55					60				
Leu	Pro	Ile	Phe	Lys	Ala	Gln	Asn	Pro	Asp	Ala	Lys	Asn	Ser	Glu	Leu
	65					70				75					80
Ile	Arg	Lys	Ile	Ala	Gln	Leu	Trp	Arg	Glu	Leu	Pro	Asp	Ser	Glu	Lys
				85					90					95	
Lys	Ile	Tyr	Glu	Asp	Ala	Tyr	Arg	Ala	Asp	Leu	Ala	Gly	His	Thr	Lys
			100					105					110		
Lys	Glu	Ile	Asn	Arg	Ile	Xaa	Glu	Pro	Gly						
			115				120								

<210> 1678

<211> 246

<212> PRT

<213> Homo sapiens

<400> 1678

Met	Ala	Leu	Phe	Arg	Cys	Val	Trp	Ser	Val	Leu	Ser	Ala	Leu	Gly	Lys
1				5					10					15	
Ser	Gly	Ser	Asp	Leu	Cys	Ala	Gly	Cys	Gly	Ser	Arg	Leu	Arg	Ser	Pro
			20					25					30		
Phe	Ser	Phe	Ala	Tyr	Val	Pro	Arg	Cys	Phe	Ser	Ser	Thr	Ala	Asn	Ser
			35				40					45			
Tyr	Pro	Lys	Lys	Pro	Leu	Thr	Ser	Tyr	Val	Arg	Phe	Ser	Lys	Glu	Gln
	50					55					60				
Leu	Pro	Ile	Phe	Lys	Ala	Gln	Asn	Pro	Asp	Ala	Lys	Asn	Ser	Glu	Leu
	65					70				75					80
Ile	Arg	Lys	Ile	Ala	Gln	Leu	Trp	Arg	Glu	Leu	Pro	Asp	Ser	Glu	Lys
				85					90					95	
Lys	Ile	Tyr	Glu	Asp	Ala	Tyr	Arg	Ala	Asp	Trp	Gln	Ala	Tyr	Lys	Glu
			100					105					110		
Glu	Ile	Asn	Arg	Ile	Gln	Glu	Gln	Leu	Thr	Pro	Ser	Gln	Ile	Val	Ser
			115				120					125			





Arg Asp Ala Val Leu Arg Cys Glu Gly Pro Ile Pro Asp Val Thr Phe  
420 425 430

Glu Leu Leu Arg Glu Gly Glu Thr Lys Ala Val Lys Thr Val Arg Thr  
435 440 445

Pro Gly Ala Ala Ala Asn Leu Glu Leu Ile Phe Val Gly Pro Gln His  
450 455 460

Ala Gly Asn Tyr Arg Cys Arg Tyr Arg Ser Trp Val Pro His Thr Phe  
465 470 475 480

Glu Ser Glu Leu Ser Asp Pro Val Glu Leu Leu Val Ala Glu Ser  
485 490 495

<210> 1680  
<211> 495  
<212> PRT  
<213> Homo sapiens

<400> 1680  
Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly  
1 5 10 15

Pro Val Thr Glu Ala Ala Ile Phe Tyr Glu Thr Gln Pro Ser Leu Trp  
20 25 30

Ala Glu Ser Glu Ser Leu Leu Lys Pro Leu Ala Asn Val Thr Leu Thr  
35 40 45

Cys Gln Ala Arg Leu Glu Thr Pro Asp Phe Gln Leu Phe Lys Asn Gly  
50 55 60

Val Ala Gln Glu Pro Val His Leu Asp Ser Pro Ala Ile Lys His Gln  
65 70 75 80

Phe Leu Leu Thr Gly Asp Thr Gln Gly Arg Tyr Arg Cys Arg Ser Gly  
85 90 95

Leu Ser Thr Gly Trp Thr Gln Leu Ser Lys Leu Leu Glu Leu Thr Gly  
100 105 110

Pro Lys Ser Leu Pro Ala Pro Trp Leu Ser Met Ala Pro Val Ser Trp  
115 120 125

Ile Thr Pro Gly Leu Lys Thr Thr Ala Val Cys Arg Gly Val Leu Arg  
130 135 140

Gly Val Thr Phe Leu Leu Arg Arg Glu Gly Asp His Glu Phe Leu Glu  
145 150 155 160

Val Pro Glu Gly Gln Glu Asp Val Glu Ala Thr Phe Pro Val His Gln  
165 170 175

Pro Gly Asn Tyr Ser Cys Ser Tyr Arg Thr Asp Gly Glu Gly Ala Leu  
180 185 190









Arg Arg Thr Ala Ser Phe His Glu Ala Arg Gln Ala Arg Pro Phe Arg  
 290 295 300  
 Glu Arg Ser Met Ser Thr Leu Thr Pro Arg Gln Ala Pro Ala Tyr Ser  
 305 310 315 320  
 Ser Arg Thr Arg Thr Cys Glu Gln Ala Glu Asp Arg Phe Arg Pro Gln  
 325 330 335  
 Ser Arg Gly Ala His Leu Phe Pro Glu Lys Leu Glu His Phe Gln Glu  
 340 345 350  
 Ala Ser Gly Thr Arg Gly Pro Leu Asn Pro Leu Pro Lys Ser Tyr Thr  
 355 360 365  
 Leu Gly Gln Pro Leu Arg Lys Pro Asp Leu Gly Asp His Gln Ala Gly  
 370 375 380  
 Leu Val Ala Gly Ile Glu Arg Thr Glu Pro His Arg Ala Arg Arg Gly  
 385 390 395 400  
 Pro Ser Pro Ser His Lys Ser Val Ser Arg Lys Gln Ser Ser Pro Ile  
 405 410 415  
 Ser Pro Lys Asp Asn Tyr Gln Arg Val Ser Ser Leu Ser Pro Ser Gln  
 420 425 430  
 Cys Arg Lys Asp Lys Cys Gln Ser Phe Pro Thr His Pro Glu Phe Ala  
 435 440 445  
 Phe Tyr Asp Asn Thr Ser Phe Gly Leu Thr Glu Ala Glu Gln Arg Met  
 450 455 460  
 Leu Asp Leu Pro Gly Tyr Phe Gly Ser Asn Glu Glu Asp Glu Thr Thr  
 465 470 475 480  
 Ser Thr Leu Ser Val Glu Lys Leu Val Ile  
 485 490

<210> 1684

<211> 178

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (175)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1684

Met Ala Met Val Pro Gly Ala Thr Leu Arg Arg Leu Leu Ser Val Val  
 1 5 10 15

Leu Pro Thr Ala Ser Gln Pro Gln Leu Leu Ala Leu Leu Asp Ser Ala  
                   20                                  25                                  30  
 Thr Glu Arg His Val Asp His Ala Ala Glu Ser Asp Gly Gly Ala Glu  
                   35                                  40                                  45  
 Gln Ala Asp Val Gly Arg Arg Arg Lys His Gln Ser Trp Trp Gln Ala  
                   50                                  55                                  60  
 Leu Asp Gly Lys Leu Arg Gly Asp Leu Ile Ser Arg Gly Leu Glu Lys  
                   65                                  70                                  75                                  80  
 Met Leu Trp Ala Arg Lys Arg Lys Gln Ser Ile Leu Lys Lys Thr Cys  
                                   85                                  90                                  95  
 Leu Pro Leu Arg Glu Arg Met Ile Phe Ser Gly Lys Gly Ser Trp Pro  
                                   100                                  105                                  110  
 His Leu Ser Leu Glu Pro Ile Gly Glu Leu Xaa Pro Val Pro Ile Val  
                                   115                                  120                                  125  
 Gly Ala Glu Thr Ile Asp Leu Leu Asn Thr Gly Glu Lys Leu Phe Ile  
                   130                                  135                                  140  
 Phe Arg Asn Pro Lys Glu Pro Glu Ile Ser Leu His Val Pro Pro Arg  
                   145                                  150                                  155                                  160  
 Lys Lys Lys Asn Phe Leu Asn Ala Lys Lys Ala Met Arg Ala Xaa Gly  
                                   165                                  170                                  175  
 Met Asp

<210> 1685  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 1685  
 Met Ala Met Val Pro Gly Ala Thr Leu Arg Arg Leu Leu Ser Val Val  
                   1                                  5                                  10                                  15  
 Leu Pro Thr Ala Ser Gln Pro Gln Leu Leu Ala Leu Leu Asp Ser Ala  
                                   20                                  25                                  30  
 Thr Glu Arg His Val Asp His Ala Ala Glu Ser Asp Gly Gly Ala Glu  
                                   35                                  40                                  45  
 Gln Ala Asp Val Gly Arg Arg Arg Lys His Gln Ser Trp Trp Gln Ala  
                   50                                  55                                  60  
 Leu Asp Gly Lys Leu Arg Gly Asp Leu Ile Ser Arg Gly Leu Glu Lys  
                   65                                  70                                  75                                  80  
 Met Leu Trp Ala Arg Lys Arg Lys Gln Ser Ile Leu Lys Lys Thr Cys  
                                   85                                  90                                  95  
 Leu Pro Leu Arg Glu Arg Met Ile Phe Ser Gly Lys Gly Ser Trp Pro

100	105	110
His Leu Ser Leu Glu Pro Ile Gly Glu Leu Gly Pro Val Pro Ile Val		
115	120	125
Gly Ala Glu Thr Ile Asp Leu Leu Asn Thr Gly Glu Lys Leu Phe Ile		
130	135	140
Phe Arg Asn Pro Lys Glu Pro Glu Ile Ser Leu Thr Phe Leu Gln Glu		
145	150	155
Lys Glu Asp Leu Phe Glu Cys Pro Lys Gly His Glu Gly Leu Gly His		
165	170	175
Gly Leu Ala Gln Gly Lys Asp Leu Arg Glu His Met Lys Arg Glu Gly		
180	185	190
Met Ile Phe Ser Cys Pro Pro Val		
195	200	

&lt;210&gt; 1686

&lt;211&gt; 419

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

Met Ser Cys Ala Gly Arg Ala Gly Pro Ala Arg Leu Ala Ala Leu Ala		
1	5	10
Leu Leu Thr Cys Ser Leu Trp Pro Ala Arg Ala Asp Asn Ala Ser Gln		
20	25	30
Glu Tyr Tyr Thr Ala Leu Ile Asn Val Thr Val Gln Glu Pro Gly Arg		
35	40	45
Gly Ala Pro Leu Thr Phe Arg Ile Asp Arg Gly Arg Tyr Gly Leu Asp		
50	55	60
Ser Pro Lys Ala Glu Val Arg Gly Gln Val Leu Ala Pro Leu Pro Leu		
65	70	75
His Gly Val Ala Asp His Leu Gly Cys Asp Pro Gln Thr Arg Phe Phe		
85	90	95
Val Pro Pro Asn Ile Lys Gln Trp Ile Ala Leu Leu Gln Arg Gly Asn		
100	105	110
Cys Thr Phe Lys Glu Lys Ile Ser Arg Ala Ala Phe His Asn Ala Val		
115	120	125
Ala Val Val Ile Tyr Asn Asn Lys Ser Lys Glu Glu Pro Val Thr Met		
130	135	140
Thr His Pro Gly Thr Gly Asp Ile Ile Ala Val Met Ile Thr Glu Leu		
145	150	155
Arg Gly Lys Asp Ile Leu Ser Tyr Leu Glu Lys Asn Ile Ser Val Gln		
165	170	175

1058









Trp Pro Ser Gly Thr Trp Cys Ala Ala Pro Arg Leu Glu Xaa Pro  
 130 135 140

<210> 1689

<211> 515

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (145)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (151)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (168)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1689

Met Ala Phe Ser Lys Leu Leu Glu Gln Ala Gly Gly Val Gly Leu Phe  
 1 5 10 15

Gln Thr Leu Gln Val Leu Thr Phe Ile Leu Pro Cys Leu Met Ile Pro  
 20 25 30

Ser Gln Met Leu Leu Glu Asn Phe Ser Ala Ala Ile Pro Gly His Arg  
 35 40 45

Cys Trp Thr His Met Leu Asp Asn Gly Ser Ala Val Ser Thr Asn Met  
 50 55 60

Thr Pro Lys Ala Leu Leu Thr Ile Ser Ile Pro Pro Gly Pro Asn Gln  
 65 70 75 80

Gly Pro His Gln Cys Arg Arg Phe Arg Gln Pro Gln Trp Gln Leu Leu  
 85 90 95

Asp Pro Asn Ala Thr Ala Thr Ser Trp Ser Glu Ala Asp Thr Glu Pro  
 100 105 110

Cys Val Asp Gly Trp Val Tyr Asp Arg Ser Val Phe Thr Ser Thr Ile  
 115 120 125

Val Ala Lys Trp Asp Leu Val Cys Ser Ser Gln Gly Leu Lys Pro Leu  
 130 135 140

Xaa Gln Ser Ile Phe Met Xaa Gly Ile Leu Val Gly Ser Phe Ile Trp  
 145 150 155 160

Gly Leu Leu Ser Tyr Arg Phe Xaa Arg Lys Pro Met Leu Ser Trp Cys  
 165 170 175

Cys Leu Gln Leu Ala Val Ala Gly Thr Ser Thr Ile Phe Ala Pro Thr









<211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 1693

Met	Leu	Ile	Ser	Gly	Trp	Ala	Arg	Trp	Leu	Met	Pro	Leu	Val	Pro	Ala
1				5					10				15		
Leu	Trp	Glu	Ala	Glu	Ala	Gly	Glu	Ser	Gly	Val	Gln	Asp	Gln	Pro	Gly
		20					25					30			
Gln	Cys	Gly	Glu	Thr	Leu	Ser	Leu	Leu	Lys	Ile	Lys	Lys	Lys	Lys	Lys
	35					40				45					
Lys	Lys	Trp	Leu	Ile	Ser	Glu	Ser	Tyr	Ser	Gly	Leu	Asn	Ser	Val	Ile
	50					55					60				
Gln	Pro	Lys	Leu	Ile	Thr	Leu	Cys	Tyr	Leu	Trp	Glu	Pro	His	Leu	Lys
	65				70				75						80
Ser	Lys	Asp	Pro	Asp	Thr	Cys	Leu	Ile	Leu	Trp	Gln	Gly	Ser	Asn	Glu
				85					90					95	
Ser	Asn	Lys	Met	Leu	Val	Lys	Val	Arg	Thr	Gly	Ser	Ile	Leu	Asn	Thr
			100					105					110		

<210> 1694  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1694

Met	Gly	Leu	Gln	Ser	Arg	Leu	Ser	Gln	Pro	Cys	His	Cys	Arg	His	Leu
1				5					10					15	
Gly	Leu	Gly	Asn	Ser	Val	Val	Gly	Thr	Val	Leu	Phe	Leu	Val	Gly	Cys
			20					25					30		
Leu	Val	Ala	Ser	Leu	Pro	Pro	Pro	Thr	Arg	Cys	Gln	Xaa	His	Cys	Ser
		35					40					45			
Pro	Gln	Pro	Pro	Ala	Pro	Val	Val	Thr	Ile	Val	Ser	Lys	His	Cys	Gln
	50					55					60				
Met	Val	Gln	Gly	Lys	Gly	Lys	Ile	Ala	Pro	Val	Xaa	Lys	Ser	Thr	Ala

65

70

75

80

Val Lys

&lt;210&gt; 1695

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1695

Met Gly Leu Gln Ser Arg Leu Ser Gln Pro Cys His Cys Arg His Leu  
 1 5 10 15

Gly Leu Gly Asn Ser Val Val Gly Thr Val Leu Phe Leu Val Gly Cys  
 20 25 30

Leu Val Ala Ser Leu Pro Pro Pro Thr Arg Cys Gln Gly His Cys Ser  
 35 40 45

Pro Gln Pro Pro Ala Pro Val Val Thr Ile Val Ser Lys His Cys Gln  
 50 55 60

Met Val Gln Gly Lys Gly Lys Ile Ala Pro Val Glu Lys Ser Thr Ala  
 65 70 75 80

Val Lys

&lt;210&gt; 1696

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

Met Gln Leu Gly Thr Leu Leu Thr Phe Phe His Glu Leu Val Gln Thr  
 1 5 10 15

Ala Leu Pro Ser Gly Ser Cys Val Asp Thr Leu Leu Lys Asp Leu Cys  
 20 25 30

Lys Met Tyr Thr Thr Leu Thr Ala Leu Val Arg Tyr Tyr Leu Gln Val  
 35 40 45

Cys Gln Ser Ser Gly Gly Ile Pro Lys Asn Met Glu Lys Leu Val Lys  
 50 55 60

Leu Ser Gly Ser His Leu Thr Pro Leu Cys Tyr Ser Phe Ile Ser Tyr  
 65 70 75 80

Val Gln Asn Lys Ser Lys Ser Leu Asn Tyr Thr Gly Glu Lys Lys Glu  
 85 90 95

Lys Pro Ala Ala Val Ala Thr Ala Met Ala Arg Val Leu Arg Glu Thr  
 100 105 110



Lys Pro Ile Pro Asn Leu Ile Phe Ala Ile Glu Gln Tyr Glu Lys Phe  
 115 120 125  
 Leu Ile His Leu Ser Lys Lys Ser Lys Val Asn Leu Met Gln His Met  
 130 135 140  
 Lys Leu Ser Thr Ser Arg Asp Phe Lys Ile Lys Gly Asn Ile Leu Asp  
 145 150 155 160  
 Met Val Leu Arg Glu Asp Gly Glu Asp Glu Asn Glu Glu Gly Thr Ala  
 165 170 175  
 Ser Glu His Gly Gly Gln Asn Lys Glu Pro Ala Lys Lys Lys Arg Lys  
 180 185 190  
 Lys

<210> 1697  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 1697  
 Met Gln Leu Gly Thr Leu Leu Thr Phe Phe His Glu Leu Val Gln Thr  
 1 5 10 15  
 Ala Leu Pro Ser Gly Ser Cys Val Asp Thr Leu Leu Lys Asp Leu Cys  
 20 25 30  
 Lys Met Tyr Thr Thr Leu Thr Ala Leu Val Arg Tyr Tyr Leu Gln Val  
 35 40 45  
 Cys Gln Ser Ser Gly Gly Ile Pro Lys Asn Met Glu Lys Leu Val Lys  
 50 55 60  
 Leu Ser Gly Ser His Leu Thr Pro Leu Cys Tyr Ser Phe Ile Ser Tyr  
 65 70 75 80  
 Val Gln Asn Lys Ser Lys Ser Leu Asn Tyr Thr Gly Glu Lys Lys Glu  
 85 90 95  
 Lys Pro Ala Ala Val Ala Thr Ala Met Ala Arg Val Leu Arg Glu Thr  
 100 105 110  
 Lys Pro Ile Pro Asn Leu Ile Phe Ala Ile Glu Gln Tyr Glu Lys Phe  
 115 120 125  
 Leu Ile His Leu Ser Lys Lys Ser Lys Val Asn Leu Met Gln His Met  
 130 135 140  
 Lys Leu Ser Thr Ser Arg Asp Phe Lys Ile Lys Gly Asn Ile Leu Asp  
 145 150 155 160  
 Met Val Leu Arg Glu Asp Gly Glu Asp Glu Asn Glu Glu Gly Thr Ala  
 165 170 175  
 Ser Glu His Gly Gly Gln Asn Lys Glu Pro Ala Lys Lys Lys Arg Lys  
 1069









Thr Ser Leu Leu Pro Ala Ser Phe Thr Lys Asn Tyr Lys Pro Val Val  
 290 295 300  
 Gln Thr Thr Gly Asn Ala Arg Ile Val Gln Glu Leu Pro Gln Leu Leu  
 305 310 315 320  
 Asp Ala Arg Ser Ala Pro Leu Ile Ala Asp Gln Ala Val Leu Gln Leu  
 325 330 335  
 Leu Pro Lys Thr Tyr Ile Leu Thr Cys Glu His Asp Val Leu Arg Asp  
 340 345 350  
 Asp Gly Ile Met Tyr Ala Lys Arg Leu Glu Ser Ala Gly Val Glu Val  
 355 360 365  
 Thr Leu Asp His Phe Glu Asp Gly Phe His Gly Cys Met Ile Phe Thr  
 370 375 380  
 Ser Trp Pro Thr Asn Phe Ser Val Gly Ile Arg Thr Arg Asn Ser Tyr  
 385 390 395 400  
 Ile Lys Trp Leu Asp Gln Asn Leu  
 405

<210> 1703  
 <211> 88  
 <212> -PRT  
 <213> Homo sapiens

<400> 1703  
 Met Met Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Leu Ala Leu Leu  
 1 5 10 15  
 Pro Gly Trp Leu Ala Val Ala Arg Ser Arg Leu Thr Ala Ile Ser Cys  
 20 25 30  
 Phe Leu Gly Leu Ser Asp Ser Pro Ala Leu Ala Ser Arg Val Ala Gly  
 35 40 45  
 Thr Thr Gly Ala His His His Ala Arg Leu Val Phe Cys Ile Leu Val  
 50 55 60  
 Glu Thr Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro Asp Phe  
 65 70 75 80  
 Val Ile Cys Leu Pro Gln Thr Pro  
 85

<210> 1704  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 1704  
 Met Met Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Leu Ala Leu Leu



Ser Asn Leu His Leu Gln Phe Asp Phe Phe Ser Asp Leu  
 50 55 60

<210> 1707  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (69)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1707  
 Val Ile Phe Phe Phe Phe Phe Ser Cys Arg Glu Arg Val Cys Val Ala  
 1 5 10 15  
 Gln Ala Gly Leu Asn Phe Met Ala Ser Ser Tyr Ser Ala Ser Ala Ser  
 20 25 30  
 Arg Ser Ala Gly Asn Ile Gly Met Ser His His Thr Gln Pro Leu Cys  
 35 40 45  
 Leu Leu Ser Phe Ser Ile Ile Ile Asn Leu Phe Met Phe Ile His Ser  
 50 55 60  
 Pro Val Asp Glu Xaa Leu Gly Cys Phe Gln Phe Trp Ala Val Thr Asn  
 65 70 75 80  
 Lys Ala Pro Gly Asn Ile Cys Val Gln Lys Lys Lys Lys Lys Lys Lys  
 85 90 95  
 Lys Lys Lys Lys Lys  
 100

<210> 1708  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1708  
 Met Ala Trp Pro Asn Val Phe Gln Arg Gly Ser Leu Leu Ser Gln Phe  
 1 5 10 15  
 Ser His His His Val Val Val Phe Leu Leu Thr Phe Phe Ser Tyr Ser  
 20 25 30  
 Leu Leu His Ala Ser Arg Lys Thr Phe Ser Asn Val Lys Val Ser Ile  
 35 40 45  
 Ser Glu Gln Trp Thr Pro Ser Ala Phe Asn Thr Ser Val Glu Leu Pro  
 50 55 60  
 Leu Glu Ile Trp Ser Ser Asn His Leu Phe Pro Ser Ala Glu Lys Ala  
 65 70 75 80





<213> Homo sapiens

<400> 1710

His His His Leu Met Gly Val Leu Cys Val Asp Val Ser Lys Gly Trp  
1 5 10 15

Val Val Asp Val Pro  
20

<210> 1711

<211> 185

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (163)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1711

Met Ala Trp Pro Asn Val Phe Gln Arg Gly Ser Leu Leu Ser Gln Phe  
1 5 10 15

Ser His His His Val Val Val Phe Leu Leu Thr Phe Phe Ser Tyr Ser  
20 25 30

Leu Leu His Ala Ser Arg Lys Thr Phe Ser Asn Val Lys Val Ser Ile  
35 40 45

Ser Glu Gln Trp Thr Pro Ser Ala Phe Asn Thr Ser Val Glu Leu Pro  
50 55 60

Leu Glu Ile Trp Ser Ser Asn His Leu Phe Pro Ser Ala Glu Lys Ala  
65 70 75 80

Thr Leu Phe Leu Gly Thr Leu Asp Thr Ile Phe Leu Phe Ser Tyr Ala  
85 90 95

Val Gly Leu Phe Ile Ser Gly Ile Val Gly Asp Arg Leu Asn Leu Arg  
100 105 110

Trp Val Leu Ser Phe Gly Met Cys Ser Ser Ala Leu Val Val Phe Val  
115 120 125

Phe Gly Ala Leu Thr Glu Trp Leu Arg Phe Tyr Asn Lys Trp Leu Tyr  
130 135 140

Cys Cys Leu Trp Ile Val Asn Gly Leu Leu Gln Ser Thr Gly Trp Pro  
145 150 155 160

Cys Val Xaa Ala Val Met Gly Asn Trp Phe Gly Lys Ala Gly Tyr Ala  
165 170 175

Thr Ser Phe Leu Ser Asn Phe Ser Val  
180 185

<210> 1712  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (14)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1712  
 Met Arg Val Ser Cys Ser Arg Ser Cys Cys Ser Leu Xaa Xaa Ile Ser  
   1                  5                  10                  15  
 Leu Ser Leu Arg Leu Val Ala Ser Cys Leu Pro Cys Cys Leu Cys Leu  
                   20                  25                  30  
 Ser Ala Ala Pro Arg Met Gln Glu Glu Pro Gly His Leu Arg Pro Ser  
                   35                  40                  45  
 Arg Ala Arg Pro Leu Glu Gly Pro Ser Trp Asp Ser Pro Ser Leu Ala  
                   50                  55                  60  
 Pro Pro Ala Ser Ala Gln Arg Pro Leu Pro Pro Pro Val Ser Arg Ile  
                   65                  70                  75                  80  
 Leu Pro Ala Thr Ser Gly Arg Ala Gly Arg Trp Cys Gly Trp Ala Pro  
                   85                  90                  95  
 Cys Pro Lys Thr Ala Ala  
                   100

<210> 1713  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1713  
 Val Trp Ala Arg Trp Pro Met Leu Ser Ile Pro Ala Ala Gln Gly Gly  
   1                  5                  10                  15  
 Arg Leu Leu Glu Pro Lys His Ser Arg Leu Ala Trp Glu Thr Xaa Gln  
                   20                  25                  30  
 Asp Pro Val Ser Thr Lys Thr Phe Lys Met Ser Gln Val Ala Gly Cys  
                   35                  40                  45  
 Gly Gly Ser Cys Leu















Lys His Glu Ser Ser Arg Glu Asp Ser Lys Trp Ser His Ser Asp Ser  
 340 345 350  
 Asp Lys Lys Ser Arg Thr His Lys His Ser Pro Glu Lys Arg Gly Ser  
 355 360 365  
 Glu Arg Lys Glu Gly Ser Ser Arg Ser His Gly Arg Glu Glu Arg Ser  
 370 375 380  
 Arg Arg Ser Arg Ser Arg Ser Pro Gly Ser Tyr Lys Gln Arg Glu Thr  
 385 390 395 400  
 Arg Lys Arg Ala Gln Arg Asn Pro Gly Glu Glu Gln Ser Arg Arg Asn  
 405 410 415  
 Asp Ser Arg Ser His Gly Thr Asp Leu Tyr Arg Gly Glu Lys Met Tyr  
 420 425 430  
 Arg Glu His Pro Gly Gly Thr His Thr Lys Val Thr Gln Arg Glu  
 435 440 445

<210> 1721  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (98)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (134)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (148)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (171)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (172)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1721  
 Met Val Gly Lys Ile Lys Arg Leu Lys Lys Ser Ala Phe Val Val Leu  
 1 5 10 15

Ile Leu Leu Ile Thr Ala Lys Leu Leu Val Leu Pro Leu Leu Cys Arg  
 20 25 30





Ile Ser Leu Ile Trp Ser Leu Ala Ile Leu Leu Leu Ser Lys Lys Tyr  
130 135 140

Lys Gln Leu Pro His Met Leu Thr Thr Asn Leu Leu Ile Ala Gln Ser  
145 150 155 160

Ile Val Cys Ala Gly Met Met Ile Trp Asn Phe Val Lys Glu Lys Asn  
165 170 175

Phe Val Gly Gln Ile Leu Val Phe Val Leu Leu Tyr Ser Ser Leu Tyr  
180 185 190

Ser Thr Tyr Leu Trp Thr Gly Leu Leu Ala Ile Ser Leu Phe Leu Leu  
195 200 205

Lys Lys Arg Glu Arg Val Gln Ile Pro Val Gly Ile Ile Ile Ile Ser  
210 215 220

Gly Trp Gly  
225

<210> 1724  
<211> 87  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (61)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (82)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1724  
Met Gln Trp Arg Ala Leu Val Leu Gly Leu Val Leu Leu Arg Leu Gly  
1 5 10 15

Leu His Gly Val Leu Trp Leu Val Phe Gly Leu Gly Pro Ser Met Gly  
20 25 30

Phe Tyr Gln Arg Phe Pro Leu Ser Phe Gly Phe Gln Arg Leu Arg Ser  
35 40 45

Pro Asp Gly Pro Ala Ser Pro Thr Phe Gly Ala Arg Xaa Pro Ala Trp  
50 55 60

Gly Gly Ile Arg Ala Val Val Ala Cys Asn Arg Arg Gly Thr Gly Gln  
65 70 75 80

Arg Xaa Thr Arg Ala Lys Leu  
85

<210> 1725

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Leu His Gly Val Leu Trp Leu Val Phe Gly Leu Gly Pro Ser Met Gly  
 20 25 30  
 Phe Tyr Gln Arg Phe Pro Leu Ser Phe Gly Phe Gln Arg Leu Arg Ser  
 35 40 45  
 Pro Asp Gly Pro Ala Ser Pro Thr Ser Gly Pro Val Gly Arg Pro Gly  
 50 55 60  
 Gly Val Ser Gly Pro Ser Trp Leu Gln Pro Pro Gly Thr Gly Ala Ala  
 65 70 75 80  
 Gln Ser Pro Arg Lys Ala Pro Arg Arg Pro Gly Pro Gly Met Cys Gly  
 85 90 95  
 Pro Ala Asn Trp Gly Tyr Val Leu Gly Gly Arg Gly Arg Gly Pro Asp  
 100 105 110  
 Glu Tyr Glu Lys Arg Tyr Ser Gly Ala Phe Pro Pro Gln Leu Arg Ala  
 115 120 125  
 Gln Met Arg Asp Leu Ala Arg Gly Met Phe Val Phe Gly Tyr Asp Asn  
 130 135 140  
 Tyr Met Ala His Ala Phe Pro Gln Asp Glu Leu Asn Pro Ile His Cys  
 145 150 155 160  
 Arg Gly Arg Gly Pro Asp Arg Gly Asp Pro Ser Asn Leu Asn Ile Asn  
 165 170 175  
 Asp Val Leu Gly Asn Tyr Ser Leu Thr Leu Val Asp Ala Leu Asp Thr  
 180 185 190  
 Leu Ala Ile Met Gly Asn Ser Ser Glu Phe Gln Lys Ala Val Lys Leu  
 195 200 205  
 Val Ile Asn Thr Val Ser Phe Asp Lys Asp Ser Thr Val Gln Val Phe  
 210 215 220  
 Glu Ala Thr Ile Arg Val Leu Gly Ser Leu Leu Ser Ala His Arg Ile  
 225 230 235 240  
 Ile Thr Asp Ser Lys Gln Pro Phe Gly Asp Met Thr Ile Lys Asp Tyr  
 245 250 255  
 Asp Asn Glu Leu Leu Tyr Met Ala His Asp Leu Ala Val Arg Leu Leu  
 260 265 270  
 Pro Ala Phe Glu Asn Thr Lys Thr Gly Ile Pro Tyr Pro Arg Val Asn  
 275 280 285  
 Leu Lys Thr Gly Val Pro Pro Asp Thr Asn Asn Glu Thr Cys Thr Ala  
 290 295 300  
 Gly Ala Gly Ser Leu Leu Val Glu Phe Gly Ile Leu Ser Arg Leu Leu  
 305 310 315 320  
 Gly Asp Ser Thr Phe Glu Trp Val Ala Arg Arg Ala Val Lys Ala Leu  
 325 330 335

Trp Asn Leu Arg Ser Asn Asp Thr Gly Leu Leu Gly Val Ala Pro Phe  
340 345 350

Leu Ala Ile Gly Thr Ala His Cys Leu Val Pro Phe Ser Phe His Leu  
355 360 365

Leu Trp Ala Leu Pro Pro Phe Tyr Ser Ser Thr Gln Leu Thr Thr Gln  
370 375 380

Gln Glu Leu Cys Gln Leu Tyr Leu Ile Ser Leu Cys Asp Pro Leu Gln  
385 390 395 400

Arg Gly Cys Met Val  
405

<210> 1727  
<211> 120  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (116)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (120)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1727  
Met Ile Leu Trp Leu Asp Trp Ala Leu Phe Leu Leu Val Phe Pro Gly  
1 5 10 15

Gln Phe Phe Cys Trp Phe Cys Leu Gly Ser Leu Met Arg Leu Gln Val  
20 25 30

Ala Ala Gly Ser Ala Ser Val Trp Gly Ser Ala Gly Met Thr Trp Pro  
35 40 45

Leu Ser Ala Cys Gly Pro Leu Ser Ser Met Met Val Ser Gly Phe Gln  
50 55 60

Ala Ser Lys Pro Gln Cys Thr Ser Ile Tyr Pro Ala Phe Ala Cys Ile  
65 70 75 80

Ala Leu Ala His Val Ser Leu Ala Lys Thr Asp His Val Ala Lys Leu  
85 90 95

Arg Val Ser Val Gly Arg Val Tyr Thr Ser Ala Trp Ile Leu Lys Gly  
100 105 110

Met Ile His Xaa Gly Pro Leu Xaa  
115 120



<210> 1728  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1728  
 Lys Tyr Ser Tyr Cys Ser His Leu His Phe Xaa Met Asn Glu Ser Ala  
   1                  5                  10                  15  
 Leu Phe Cys Ser Asn Phe His Trp Lys Pro Val Gly Ser Glu Arg Leu  
                   20                  25                  30  
 Trp Pro Pro Leu Ile Ile Tyr Asp Leu Lys Pro Ala Cys Asn Arg Glu  
                   35                  40                  45  
 Pro Leu Gln Ser Leu  
                   50

<210> 1729  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1729  
 Met Ile Leu Trp Leu Asp Trp Ala Leu Phe Leu Leu Val Phe Pro Gly  
   1                  5                  10                  15  
 Gln Phe Phe Cys Trp Phe Cys Leu Gly Ser Leu Met Arg Leu Gln Val  
                   20                  25                  30  
 Ala Ala Gly Ser Ala Ser Val Trp Gly Ser Ala Gly Met Thr Trp Pro  
                   35                  40                  45  
 Leu Ser Ala Cys Gly Pro Leu Ser Ser Met Met Val Ser Gly Phe Gln  
                   50                  55                  60  
 Ala Ser Lys Pro Gln Cys Thr Ser Ile Tyr Pro Ala Phe Ala Cys Ile  
                   65                  70                  75                  80  
 Ala Leu Ala His Val Ser Leu Ala Lys Thr Asp His Val Ala Lys Leu  
                   85                  90                  95  
 Arg Val Ser Val Gly Arg Val Tyr Thr Ser Ala Trp Ile Leu Lys Gly  
                   100                  105                  110  
 Met Ile His Trp Gly Pro Leu Leu  
                   115                  120

<210> 1730  
 <211> 485  
 <212> PRT

<213> Homo sapiens

<400> 1730

Met Leu Pro Thr Phe Leu Leu Met Asn Leu Leu Ser Leu Ala Gly Asp  
1 5 10 15  
Val Ala Leu Gln Gln Leu Val His Leu Glu Gln Ala Val Ser Gly Glu  
20 25 30  
Leu Cys Arg Arg Arg Val Leu Arg Glu Glu Gln Glu His Lys Thr Lys  
35 40 45  
Asp Pro Lys Glu Lys Asn Thr Ser Ser Glu Thr Thr Met Glu Glu Glu  
50 55 60  
Leu Gly Leu Val Gly Ala Thr Ala Asp Asp Thr Glu Ala Glu Leu Ile  
65 70 75 80  
Arg Gly Ile Cys Glu Met Glu Leu Leu Asp Gly Lys Gln Thr Leu Ala  
85 90 95  
Ala Phe Val Pro Leu Leu Leu Lys Val Cys Asn Asn Pro Gly Leu Tyr  
100 105 110  
Ser Asn Pro Asp Leu Ser Ala Ala Ala Ser Leu Ala Leu Gly Lys Phe  
115 120 125  
Cys Met Ile Ser Ala Thr Phe Cys Asp Ser Gln Leu Arg Leu Leu Phe  
130 135 140  
Thr Met Leu Glu Lys Ser Pro Leu Pro Ile Val Arg Ser Asn Leu Met  
145 150 155 160  
Val Ala Thr Gly Asp Leu Ala Ile Arg Phe Pro Asn Leu Val Asp Pro  
165 170 175  
Trp Thr Pro His Leu Tyr Ala Arg Leu Arg Asp Pro Ala Gln Gln Val  
180 185 190  
Arg Lys Thr Ala Gly Leu Val Met Thr His Leu Ile Leu Lys Asp Met  
195 200 205  
Val Lys Val Lys Gly Gln Val Ser Glu Met Ala Val Leu Leu Ile Asp  
210 215 220  
Pro Glu Pro Gln Ile Ala Ala Leu Ala Lys Asn Phe Phe Asn Glu Leu  
225 230 235 240  
Ser His Lys Gly Asn Ala Ile Tyr Asn Leu Leu Pro Asp Ile Ile Ser  
245 250 255  
Arg Leu Ser Asp Pro Glu Leu Gly Val Glu Glu Glu Pro Phe His Thr  
260 265 270  
Ile Met Lys Gln Leu Leu Ser Tyr Ile Thr Lys Asp Lys Gln Thr Glu  
275 280 285  
Ser Leu Val Glu Lys Leu Cys Gln Arg Phe Arg Thr Ser Arg Thr Glu  
290 295 300

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Arg Gln Gln Arg Asp Leu Ala Tyr Cys Val Ser Gln Leu Pro Leu Thr  
305 310 315 320

Glu Arg Gly Leu Arg Lys Met Leu Asp Asn Phe Asp Cys Phe Gly Asp  
325 330 335

Lys Leu Ser Asp Glu Ser Ile Phe Ser Ala Phe Leu Ser Val Val Gly  
340 345 350

Lys Leu Arg Arg Gly Ala Lys Pro Glu Gly Lys Ala Ile Ile Asp Glu  
355 360 365

Phe Glu Gln Lys Leu Arg Ala Cys His Thr Arg Gly Leu Asp Gly Ile  
370 375 380

Lys Glu Leu Glu Ile Gly Gln Ala Gly Ser Gln Arg Ala Pro Ser Ala  
385 390 395 400

Lys Lys Pro Ser Thr Gly Ser Arg Tyr Gln Pro Leu Ala Ser Thr Ala  
405 410 415

Ser Asp Asn Asp Phe Val Thr Pro Glu Pro Arg Arg Thr Thr Arg Arg  
420 425 430

His Pro Asn Thr Gln Gln Arg Ala Ser Lys Lys Lys Pro Lys Val Val  
435 440 445

Phe Ser Ser Asp Glu Ser Ser Glu Glu Asp Leu Ser Ala Glu Met Thr  
450 455 460

Glu Asp Glu Thr Pro Lys Lys Thr Thr Pro Ile Leu Arg Ala Ser Ala  
465 470 475 480

Arg Arg His Arg Ser  
485

<210> 1731  
<211> 485  
<212> PRT  
<213> Homo sapiens

<400> 1731  
Met Leu Pro Thr Phe Leu Leu Met Asn Leu Leu Ser Leu Ala Gly Asp  
1 5 10 15

Val Ala Leu Gln Gln Leu Val His Leu Glu Gln Ala Val Ser Gly Glu  
20 25 30

Leu Cys Arg Arg Arg Val Leu Arg Glu Glu Gln Glu His Lys Thr Lys  
35 40 45

Asp Pro Lys Glu Lys Asn Thr Ser Ser Glu Thr Thr Met Glu Glu Glu  
50 55 60

Leu Gly Leu Val Gly Ala Thr Ala Asp Asp Thr Glu Ala Glu Leu Ile  
65 70 75 80

Arg Gly Ile Cys Glu Met Glu Leu Leu Asp Gly Lys Gln Thr Leu Ala





Arg	Lys	Thr	Ala	Gly	Leu	Val	Met	Thr	His	Leu	Ile	Leu	Lys	Asp	Met	195	200	205	
Val	Lys	Val	Lys	Gly	Gln	Val	Ser	Glu	Met	Ala	Val	Leu	Leu	Ile	Asp	210	215	220	
Pro	Glu	Pro	Gln	Ile	Ala	Ala	Leu	Ala	Lys	Asn	Phe	Phe	Asn	Glu	Leu	225	230	235	240
Ser	His	Lys	Gly	Asn	Ala	Ile	Tyr	Asn	Leu	Leu	Pro	Asp	Ile	Ile	Ser	245	250	255	
Arg	Leu	Ser	Asp	Pro	Glu	Leu	Gly	Val	Glu	Glu	Glu	Pro	Phe	His	Thr	260	265	270	
Ile	Met	Lys	Gln	Leu	Leu	Ser	Tyr	Ile	Thr	Lys	Asp	Lys	Gln	Thr	Glu	275	280	285	
Ser	Leu	Val	Glu	Lys	Leu	Cys	Gln	Arg	Phe	Arg	Thr	Ser	Arg	Thr	Glu	290	295	300	
Arg	Gln	Gln	Arg	Asp	Leu	Ala	Tyr	Cys	Val	Ser	Gln	Leu	Pro	Leu	Thr	305	310	315	320
Glu	Arg	Gly	Leu	Arg	Lys	Met	Leu	Asp	Asn	Phe	Asp	Cys	Phe	Gly	Asp	325	330	335	
Lys	Leu	Ser	Asp	Glu	Ser	Ile	Phe	Ser	Ala	Phe	Leu	Ser	Val	Val	Gly	340	345	350	
Lys	Leu	Arg	Arg	Gly	Ala	Lys	Pro	Glu	Gly	Lys	Ala	Ile	Ile	Asp	Glu	355	360	365	
Phe	Glu	Gln	Lys	Leu	Arg	Ala	Cys	His	Thr	Arg	Gly	Leu	Asp	Gly	Ile	370	375	380	
Lys	Glu	Leu	Glu	Ile	Gly	Gln	Ala	Gly	Ser	Gln	Arg	Ala	Pro	Ser	Ala	385	390	395	400
Lys	Lys	Pro	Ser	Thr	Gly	Ser	Arg	Tyr	Gln	Pro	Leu	Ala	Ser	Thr	Ala	405	410	415	
Ser	Asp	Asn	Asp	Phe	Val	Thr	Pro	Glu	Pro	Arg	Arg	Thr	Thr	Arg	Arg	420	425	430	
His	Pro	Asn	Thr	Gln	Gln	Arg	Ala	Ser	Lys	Lys	Lys	Pro	Lys	Val	Val	435	440	445	
Phe	Ser	Ser	Asp	Glu	Ser	Ser	Glu	Glu	Asp	Leu	Ser	Ala	Glu	Met	Thr	450	455	460	
Glu	Asp	Glu	Thr	Pro	Lys	Lys	Thr	Thr	Pro	Ile	Leu	Arg	Ala	Ser	Ala	465	470	475	480
Arg	Arg	His	Arg	Ser												485			

<210> 1733  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 1733  
 Met Val Val Thr Thr Glu Pro Leu Thr Gln Ala Val Val Asp Lys Thr  
   1                  5                  10                  15  
 Leu Leu Leu Val Val Leu Leu Leu Gly Val Thr Leu Phe Ile Thr Val  
                   20                  25                  30  
 Leu Val Leu Phe Ala Leu Gln Ala Tyr Glu Ser Tyr Lys Lys Lys Asp  
           35                  40                  45  
 Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser Glu  
   50                  55                  60  
 Met  
 65

<210> 1734  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 1734  
 Met Val Val Thr Thr Glu Pro Leu Thr Gln Ala Val Val Asp Lys Thr  
   1                  5                  10                  15  
 Leu Leu Leu Val Val Leu Leu Leu Gly Val Thr Leu Phe Ile Thr Val  
                   20                  25                  30  
 Leu Val Leu Phe Ala Leu Gln Ala Tyr Glu Ser Tyr Lys Lys Lys Asp  
           35                  40                  45  
 Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser Glu  
   50                  55                  60  
 Met  
 65

<210> 1735  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (150)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (271)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1735

Met Trp Thr Ala Leu Val Leu Ile Trp Ile Phe Ser Leu Ser Leu Ser  
1 5 10 15  
Glu Ser His Ala Ala Ser Asn Asp Pro Arg Asn Phe Val Pro Asn Lys  
20 25 30  
Met Trp Lys Gly Leu Val Lys Arg Asn Ala Ser Val Glu Thr Val Asp  
35 40 45  
Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ala Ser Pro Val Thr  
50 55 60  
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr  
65 70 75 80  
Thr Glu Asp Thr Ser Arg Thr Asp Val Ser Glu Pro Ala Thr Ser Gly  
85 90 95  
Gly Ala Ala Asp Gly Val Thr Ser Ile Ala Pro Thr Ala Val Ala Ser  
100 105 110  
Ser Thr Thr Ala Ala Ser Ile Thr Thr Ala Ala Ser Ser Met Thr Val  
115 120 125  
Ala Ser Ser Ala Pro Thr Thr Ala Ala Ser Ser Thr Thr Val Ala Ser  
130 135 140  
Ile Ala Pro Thr Thr Xaa Ala Ser Ser Met Thr Ala Ala Ser Ser Thr  
145 150 155 160  
Pro Met Thr Leu Ala Leu Pro Ala Pro Thr Ser Thr Ser Thr Gly Arg  
165 170 175  
Thr Pro Ser Thr Thr Ala Thr Gly His Pro Ser Leu Ser Thr Ala Leu  
180 185 190  
Ala Gln Val Pro Lys Ser Ser Ala Leu Pro Arg Thr Ala Thr Leu Ala  
195 200 205  
Thr Leu Ala Thr Arg Ala Gln Thr Val Ala Thr Thr Ala Asn Thr Ser  
210 215 220  
Ser Pro Met Ser Thr Arg Pro Ser Pro Ser Lys His Met Pro Ser Asp  
225 230 235 240  
Thr Ala Ala Ser Pro Val Pro Pro Met Arg Pro Gln Ala Gln Gly Pro  
245 250 255  
Ile Ser Gln Val Ser Val Asp Gln Pro Val Val Asn Thr Thr Xaa Lys  
260 265 270  
Ser Thr Pro Met Pro Ser Asn Thr Thr Thr Glu Pro Leu Thr Gln Ala  
275 280 285  
Val Val Asp Lys Thr Leu Leu Leu Val Val Leu Leu Leu Gly Val Thr  
290 295 300  
Leu Phe Ile Thr Val Leu Val Leu Phe Ala Leu Gln Ala Tyr Glu Ser

1100

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50

55

60

Ala Pro Leu Ser Leu Arg Ser Met Val Phe His Asn Ala Pro Ile  
 65 70 75

&lt;210&gt; 1738

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1738

Met Thr Leu Pro Thr Ser Gln Cys Leu Ile Cys Leu Leu Gln Ala Leu  
 1 5 10 15

Cys Gly Ile Gly His Gly Ala Leu Ala Trp Gly Ser Asn Gln Val Leu  
 20 25 30

Phe Pro Gly Gly Gln Gln Glu Asp Gly Gly Cys Gln Arg Ile Pro Asp  
 35 40 45

Pro Ser Phe Leu Ser Thr Pro Cys Gly Lys Gln Gly Gly His Ala Glu  
 50 55 60

Gln Glu Leu Gln Gln Cys Trp Gly Ala Phe Cys Gln Leu Pro Gly Cys  
 65 70 75 80

Val Leu His Phe His Pro Gly Val Leu His Lys Ala His Ser Glu Trp  
 85 90 95

&lt;210&gt; 1739

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (134)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (142)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (161)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<400> 1739

Met Ala Leu Pro Arg Cys Thr Trp Pro Asn Tyr Val Trp Arg Ala Val  
1 5 10 15

Met Ala Cys Leu Val His Arg Gly Leu Gly Ala Pro Leu Thr Leu Cys  
20 25 30

Met Leu Gly Cys Leu Leu Gln Ala Gly His Val Leu Ser Gln Lys Leu  
35 40 45

Asp Asp Val Asp Pro Leu Val Ala Thr Asn Phe Gly Lys Ile Arg Gly  
50 55 60

Ile Lys Lys Glu Leu Asn Asn Glu Ile Leu Gly Pro Val Ile Gln Phe  
65 70 75 80

Leu Gly Val Pro Tyr Ala Ala Pro Pro Thr Gly Glu Arg Arg Phe Gln  
85 90 95

Pro Pro Glu Pro Pro Ser Pro Trp Ser Asp Ile Arg Asn Ala Thr Gln  
100 105 110

Phe Ala Pro Val Cys Pro Gln Asn Ile Ile Asp Gly Arg Leu Pro Glu  
115 120 125

Val Met Leu Pro Val Xaa Phe Thr Asn Asn Leu Asp Val Xaa Ser Ser  
130 135 140

Tyr Val Gln Asp Gln Ser Glu Arg Leu Xaa Ile Phe Lys Tyr Ile Cys  
145 150 155 160

Xaa Asp

<210> 1740

<211> 228

<212> PRT

<213> Homo sapiens

<400> 1740

Met Ala Leu Pro Arg Cys Thr Trp Pro Asn Tyr Val Trp Arg Ala Val  
1 5 10 15

Met Ala Cys Leu Val His Arg Gly Leu Gly Ala Pro Leu Thr Leu Cys  
20 25 30

Met Leu Gly Cys Leu Leu Gln Ala Gly His Val Leu Ser Gln Lys Leu  
35 40 45

Asp Asp Val Asp Pro Leu Val Ala Thr Asn Phe Gly Lys Ile Arg Gly  
50 55 60

Ile Lys Lys Glu Leu Asn Asn Glu Ile Leu Gly Pro Val Ile Gln Phe  
65 70 75 80

Leu Gly Val Pro Tyr Ala Ala Pro Pro Thr Gly Glu Arg Arg Phe Gln  
85 90 95

1103

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Pro Pro Glu Pro Pro Ser Pro Trp Ser Asp Ile Arg Asn Ala Thr Gln  
 100 105 110  
 Phe Ala Pro Val Cys Pro Gln Asn Ile Ile Asp Gly Arg Leu Pro Glu  
 115 120 125  
 Val Met Leu Pro Val Trp Phe Thr Asn Asn Leu Asp Val Val Ser Ser  
 130 135 140  
 Tyr Val Gln Asp Gln Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Val  
 145 150 155 160  
 Pro Thr Glu Asp Asp Ile Arg Asp Ser Gly Gly Pro Lys Pro Val Met  
 165 170 175  
 Val Tyr Ile His Gly Gly Ser Tyr Met Glu Gly Thr Gly Asn Leu Tyr  
 180 185 190  
 Asp Gly Ser Val Leu Ala Ser Tyr Gly Asn Val Ile Val Ile Thr Val  
 195 200 205  
 Asn Tyr Arg Leu Gly Val Leu Gly Lys Lys Ser Leu Ser Phe Val Phe  
 210 215 220  
 Thr Met Asn Pro  
 225

<210> 1741  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1741  
 Met Leu Pro Thr Leu Thr Ala Pro Thr Leu Ala Leu Leu Leu Leu Pro  
 1 5 10 15  
 Lys Ile Ser Cys Leu Leu Thr Ser Thr His Pro Arg Thr Gln Gly Ser  
 20 25 30  
 Arg Ala His Phe Pro Arg Ala Trp Arg Leu Asp Pro Gly Glu Phe Leu  
 35 40 45  
 His Pro Leu Gln Asp Pro His Ser Ser Pro Leu Trp Ser Leu Asp His  
 50 55 60  
 Arg Trp Arg Trp Pro Glu Leu Thr Cys Trp Leu Trp Gly His Ser Ser  
 65 70 75 80  
 Cys Trp Pro Arg Met Arg Arg Gly Thr Arg Glu Tyr Lys Gly  
 85 90

<210> 1742  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens



Val Cys Leu Leu Leu Leu Cys Pro Arg Glu Val Ile Ala Pro Ala Gly  
20 25 30

Ser Glu Pro Trp Leu Cys Gln Pro Ala Pro Arg Cys Gly Asp Lys Ile  
35 40 45

Tyr Asn Pro Leu Glu Gln Cys Cys Tyr Asn Asp Ala Ile Val Ser Leu  
50 55 60

Ser Glu Thr Arg Gln Cys Gly Pro Pro Cys Thr Phe Trp Pro Cys Phe  
65 70 75 80

Glu Leu Cys Cys Leu Asp Ser Phe Gly Leu Thr Asn Asp Phe Val Val  
85 90 95

Lys Leu Lys Val Gln Gly Val Asn Ser Gln Cys His Ser Ser Pro Ile  
100 105 110

Ser Ser Lys Cys Glu Ser Arg Arg Arg Phe Pro  
115 120

<210> 1745  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 1745  
Met His Pro Leu Pro Cys Leu His Leu Trp Glu Phe Phe Leu Ser Glu  
1 5 10 15

Trp Gly Gln Phe Leu Ala Gln Gly Ser Glu Leu Arg Gln Pro Gln Gly  
20 25 30

Arg Gly Pro Tyr Leu Leu Ser Ser Val Leu Gly Tyr Arg Glu Gln Pro  
35 40 45

Gly Asp Ser Leu Val Pro Pro Pro Trp Arg Val Ser Leu Thr His Ser  
50 55 60

Pro Ser Leu Arg Ala Ser Trp Pro Thr Ala Ser Leu Trp Glu Ser Gly  
65 70 75 80

Arg Arg Ala Arg Trp Val Ala Gly Ala Arg Leu Leu Ser Pro Pro Pro  
85 90 95

Ala Asp Phe Leu Leu Leu Pro Leu Ile Pro Phe  
100 105

<210> 1746  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 1746  
Met His Pro Leu Pro Cys Leu His Leu Trp Glu Phe Phe Leu Ser Glu



<221> SITE  
 <222> (23)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1748

Asp Val Leu Gln Ile Thr Phe Trp Trp Pro Leu Val Thr Ala Val Ser  
 1 5 10 15  
 Leu Gln Gly Leu Asn Lys Xaa Leu Ser Pro Ile Pro Phe His Thr Cys  
 20 25 30  
 Val Val Tyr Tyr Trp Gln Ala Ser Val Leu Arg Val Ser Asn Gly Thr  
 35 40 45  
 Asp Gly Cys Gln Thr Leu Trp Ile Ser Ala Ser Pro Gly Trp  
 50 55 60

<210> 1749

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1749

Met Ala Gly Tyr Gln Lys His His Gly Ser Phe Ala Ile Cys Cys Leu  
 1 5 10 15  
 Phe Ser Ala Leu Ser Leu Thr Leu Ser Phe Gln Glu Gly Glu Asn Glu  
 20 25 30  
 Cys Phe Pro Ala Phe Ser Val Leu Cys Ser Lys Glu Glu Ser Arg Cys  
 35 40 45  
 Trp Leu Pro Asn Leu Pro Tyr Phe Leu Ile Ala Val Arg Gly Ile Asn  
 50 55 60  
 Cys Met Phe Pro Glu Gly Lys Gly Trp Leu Thr Asp Leu Leu Glu Gly  
 65 70 75 80  
 Ile Leu Ser Val Glu Ala Gly Gln Glu Asn Pro Gly Ile Ser Phe Ala  
 85 90 95  
 Gly Phe Cys Ala Val Pro Leu Pro Ser Ser Cys Leu Lys Cys Glu Tyr  
 100 105 110  
 Cys Phe Pro Ala Phe Gln Arg Trp  
 115 120

<210> 1750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1750

Met Asp Asp Phe Leu Phe Ser Val Ser Ile Leu Ser Gly Ile Leu Cys  
 1 5 10 15







<210> 1753

<211> 424

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (138)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (183)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1753

Met Leu Asp Lys Ile Ile Ser Ile Phe Ile Ile Phe Leu Leu Val Ile  
1 5 10 15

Gly Thr Leu Leu Leu Ala Leu Leu Leu Thr Ala Lys Val His Gln Glu  
20 25 30

Ser Val His Met Ile Glu Val Thr Ser Asn Leu Ile Asn Glu Thr Leu  
35 40 45

Ala Asn His Pro Glu Trp Ala Asn Trp Leu Pro Glu Ala Gln Val Val  
50 55 60

Gln Arg Ala Leu Asn Ser Ala Ala Asn Asn Val Tyr Gln Tyr Gly Arg  
65 70 75 80

Glu Trp Ile Thr His Lys Leu His Lys Ile Leu Gly Asp Lys Val Asn  
85 90 95

Asn Thr Ala Val Ile Glu Lys Gln Val Leu Glu Leu Trp Asp Arg Leu  
100 105 110

Tyr His Ser Trp Phe Val Lys Asn Val Thr His Ser Gly Arg His Lys  
115 120 125

Gly Gln Lys Leu His Val Ser Arg Gln Xaa Ser Trp Leu Gly Asp Ile  
130 135 140

Leu Asp Trp Gln Asp Ile Val Ser Phe Val His Glu Asn Ile Glu Thr  
145 150 155 160

Phe Leu Ser Ile Leu Glu Ser Leu Trp Ile Val Met Ser Arg Asn Val  
165 170 175

Ser Leu Leu Phe Thr Thr Xaa Thr Thr Leu Leu Thr Ile Leu Phe Tyr  
180 185 190

Ser Gly Thr Ala Leu Leu Asn Phe Val Leu Ser Leu Ile Ile Phe Leu

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Asn His Arg Ser Tyr Ser Ser Leu His Thr Cys Gly Cys Phe Gln Tyr  
 370 375 380

Leu  
 385

<210> 1755  
 <211> 293  
 <212> PRT  
 <213> Homo sapiens

<400> 1755

Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu  
 1 5 10 15

Leu Val Ala Glu Ala Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala  
 20 25 30

Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu  
 35 40 45

Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu  
 50 55 60

Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr  
 65 70 75 80

Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg  
 85 90 95

Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe  
 100 105 110

Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys  
 115 120 125

Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe  
 130 135 140

Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro  
 145 150 155 160

Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser  
 165 170 175

Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu  
 180 185 190

Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala  
 195 200 205

Gly Glu Leu Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu Glu  
 210 215 220

Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala  
 225 230 235 240



210	215	220
Asn Gly Tyr Arg Arg Phe Asp Pro Ala Arg Gly Met Glu Tyr Thr Leu 225 230 235 240		
Asp Pro Gly Ser Thr His Ala Ser Glu Arg Gly His Arg Arg Ala Leu 245 250 255		
Ala Arg Arg Val Ser Leu Leu Arg Pro Leu Ser Arg Val Glu Ile Leu 260 265 270		
Pro Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro 275 280 285		
Leu Leu Val Ala Glu Ala Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe 290 295 300		
Ala Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu 305 310 315 320		
Leu Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe 325 330 335		
Leu Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly 340 345 350		
Thr Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val 355 360 365		
Arg Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe 370 375 380		
Phe Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg 385 390 395 400		
Cys Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His 405 410 415		
Phe Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly 420 425 430		
Pro Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro 435 440 445		
Ser Arg Gly Ala Pro Ile Ala Gly Arg Phe Asp Arg Gln Ala Ser Ala 450 455 460		
Glu Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu 465 470 475 480		
Ala Gly Glu Leu Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu 485 490 495		
Glu Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg 500 505 510		
Ala Val Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser 515 520 525		
Pro Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu		





Lys Met Met Leu Asp Lys Trp Glu Lys Ile Cys Ser Thr Gln Asp Thr  
 165 170 175  
 Ser Val Glu Val Tyr Glu His Ile Asn Ser Met Ser Leu Asp Ile Ile  
 180 185 190  
 Met Lys Cys Ala Phe Ser Lys Glu Thr Asn Cys Gln Thr Asn Ser Thr  
 195 200 205  
 His Asp Pro Tyr Ala Lys Ala Ile Leu Asn Ser Ala Xaa Ser Tyr Phe  
 210 215 220  
 Thr Val Val Gln Leu Leu Tyr His Ser Asp Ile Phe Phe Lys Phe Ser  
 225 230 235 240  
 Xaa Gln Gly Tyr Arg Xaa Pro Glu Leu  
 245

<210> 1758  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (88)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (89)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1758  
 Ala Gln Gly His Pro Trp Ser Val Arg Thr Gln Leu Pro Arg Ile Pro  
 1 5 10 15  
 Arg Pro Ser Pro Met Thr Leu Gly Pro Gln Ile Leu Ile Cys His Ser  
 20 25 30  
 Gly Ser Ala Ala Gly Ser Arg Asn Cys Ile Gly Gln Glu Phe Ala Met  
 35 40 45  
 Ile Glu Leu Lys Val Thr Ile Ala Leu Ile Leu Leu His Phe Arg Val  
 50 55 60  
 Thr Pro Asp Pro Thr Arg Pro Leu Thr Xaa Pro Asn His Phe Ile Leu  
 1118

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65

70

75

80

Lys Pro Lys Asn Gly Met Tyr Xaa Xaa Leu Xaa Lys Leu Ser Glu Cys  
85 90 95

<210> 1759

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (242)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

&lt;221&gt; SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (248)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1759

Met Glu Phe Ser Trp Leu Glu Thr Arg Trp Ala Arg Pro Phe Tyr Leu  
1 5 10 15

Ala Phe Val Phe Cys Leu Ala Leu Gly Leu Leu Gln Ala Ile Lys Leu  
20 25 30

Tyr Leu Arg Arg Gln Arg Leu Leu Arg Asp Leu Arg Pro Phe Pro Ala  
35 40 45

Pro Pro Thr His Trp Phe Leu Gly His Gln Lys Phe Ile Gln Asp Asp  
50 55 60

Asn Met Glu Lys Leu Glu Glu Ile Ile Glu Lys Tyr Pro Arg Ala Phe  
65 70 75 80

Pro Phe Trp Ile Gly Pro Phe Gln Ala Phe Phe Cys Ile Tyr Asp Pro  
85 90 95

Asp Tyr Ala Lys Thr Leu Leu Ser Arg Thr Asp Pro Lys Ser Gln Tyr  
100 105 110

Leu Gln Lys Phe Ser Pro Pro Leu Leu Gly Lys Gly Leu Ala Ala Leu  
115 120 125

Asp Gly Pro Lys Trp Phe Gln His Arg Arg Leu Leu Thr Pro Gly Phe  
130 135 140

His Phe Asn Ile Leu Lys Ala Tyr Ile Glu Val Met Ala His Ser Val  
145 150 155 160

1119

Figure 1: Schematic representation of the experimental design. The figure is divided into two main sections: 'Pre-treatment' and 'Treatment'. The 'Pre-treatment' section shows a timeline from 0 to 120 minutes, with 'Pre-treatment' starting at 0 and 'Treatment' starting at 120. The 'Treatment' section shows a timeline from 0 to 120 minutes, with 'Treatment' starting at 0 and 'Pre-treatment' starting at 120. The 'Pre-treatment' section includes a 'Pre-treatment' box and a 'Treatment' box. The 'Treatment' section includes a 'Pre-treatment' box and a 'Treatment' box. The 'Pre-treatment' section includes a 'Pre-treatment' box and a 'Treatment' box. The 'Treatment' section includes a 'Pre-treatment' box and a 'Treatment' box.



Ser Val Glu Val Tyr Glu His Ile Asn Ser Met Ser Leu Asp Ile Ile  
180 185 190

Met Lys Cys Ala Phe Ser Lys Glu Thr Asn Cys Gln Thr Asn Ser Thr  
195 200 205

His Asp Pro Tyr Ala Lys Ala Ile Phe Glu Leu Ser Lys Ile Ile Phe  
210 215 220

His Arg Leu Tyr Ser Leu Leu Tyr His Ser Asp Ile Ile Phe Lys Leu  
225 230 235 240

Ser Pro Gln Gly Tyr Arg Phe Gln Lys Leu Ser Arg Val Leu Asn Gln  
245 250 255

Tyr Thr Asp Thr Ile Ile Gln Glu Arg Lys Lys Ser Leu Gln Ala Gly  
260 265 270

Val Lys Gln Asp Asn Thr Pro Lys Arg Lys Tyr Gln Asp Phe Leu Asp  
275 280 285

Ile Val Leu Ser Ala Lys Asp Glu Ser Gly Ser Ser Phe Ser Asp Ile  
290 295 300

Asp Val His Ser Glu Val Ser Thr Phe Leu Leu Ala Gly His Asp Thr  
305 310 315 320

Leu Ala Ala Ser Ile Ser Trp Ile Leu Tyr Cys Leu Ala Leu Asn Pro  
325 330 335

Glu His Gln Glu Arg Cys Arg Glu Glu Val Arg Gly Ile Leu Gly Asp  
340 345 350

Gly Ser Ser Ile Thr Trp Asp Gln Leu Gly Glu Met Ser Tyr Thr Thr  
355 360 365

Met Cys Ile Lys Glu Thr Cys Arg Leu Ile Pro Ala Val Pro Ser Ile  
370 375 380

Ser Arg Asp Leu Ser Lys Pro Leu Thr Phe Pro Asp Gly Cys Thr Leu  
385 390 395 400

Pro Ala Gly Ile Thr Val Val Leu Ser Ile Trp Gly Leu His His Asn  
405 410 415

Pro Ala Val Trp Lys Asn Pro Lys Val Phe Asp Pro Leu Arg Phe Ser  
420 425 430

Gln Glu Asn Ser Asp Gln Arg His Pro Tyr Ala Tyr Leu Pro Phe Ser  
435 440 445

Ala Gly Ser Arg Asn Cys Ile Gly Gln Glu Phe Ala Met Ile Glu Leu  
450 455 460

Lys Val Thr Ile Ala Leu Ile Leu Leu His Phe Arg Val Thr Pro Asp  
465 470 475 480

Pro Thr Arg Pro Leu Thr Phe Pro Asn His Phe Ile Leu Lys Pro Lys  
485 490 495



Asn Ile Pro Asp Met Leu Gln Ser Leu Val Gly Gln Gln Asn Ala Arg  
85 90 95  
His Gly Ile Ile Lys Ile Phe Asn Ala Leu Gln Glu Thr Arg Ala Asn  
100 105 110  
Lys His Leu Leu Tyr Ala Leu Met Glu Leu Leu Leu Ile Glu Leu Cys  
115 120 125  
Pro Glu Leu Arg Val His Leu Asp Gln Leu Lys Ala Gly Gln Val  
130 135 140

<210> 1763  
<211> 88  
<212> PRT  
<213> Homo sapiens

<400> 1763  
Met Lys Ser Leu Ile Lys Thr Tyr Phe Leu Leu Trp Thr Leu Lys Lys  
1 5 10 15  
Leu Leu Pro Leu Ser Thr Leu Ile Pro Ile Met Leu Ser Pro Leu Asp  
20 25 30  
Ile Phe Phe Ser Asp Asn Pro His Ile Asp Cys Ser Gly His His Phe  
35 40 45  
Val Pro Tyr Leu Leu Ile Gly Leu Asp Thr Asp Pro Gln Phe Thr Cys  
50 55 60  
Leu Tyr Leu Leu Ile Leu Thr Leu Leu Val Phe Val Phe Ser Leu Thr  
65 70 75 80  
Leu Leu Ser Pro Pro Ser Pro Gly  
85

<210> 1764  
<211> 88  
<212> PRT  
<213> Homo sapiens

<400> 1764  
Met Lys Ser Leu Ile Lys Thr Tyr Phe Leu Leu Trp Thr Leu Lys Lys  
1 5 10 15  
Leu Leu Pro Leu Ser Thr Leu Ile Pro Ile Met Leu Ser Pro Leu Asp  
20 25 30  
Ile Phe Phe Ser Asp Asn Pro His Ile Asp Cys Ser Gly His His Phe  
35 40 45  
Val Pro Tyr Leu Leu Ile Gly Leu Asp Thr Asp Pro Gln Phe Thr Cys  
50 55 60  
Leu Tyr Leu Leu Ile Leu Thr Leu Leu Val Phe Val Phe Ser Leu Thr  
1123

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100

105

110

Phe Phe Pro Gly Leu Ser Ala Phe Cys Pro Asn Phe Ile Cys Phe  
 115 120 125

&lt;210&gt; 1767

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (192)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (222)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (235)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1767

Met Ala Leu Ser Ser Leu Ile Val Ile Leu Leu Val Val Phe Ala Leu  
 1 5 10 15

Val Leu His Gly Gln Asn Lys Lys Tyr Lys Asn Cys Ser Thr Gly Lys  
 20 25 30

Gly Ile Ser Thr Met Glu Glu Ser Val Thr Leu Asp Asn Gly Gly Phe  
 35 40 45

Ala Ala Leu Glu Leu Ser Ser Arg His Leu Asn Val Lys Ser Thr Phe  
 50 55 60

Ser Lys Lys Asn Gly Thr Arg Ser Pro Pro Arg Pro Ser Pro Gly Gly  
 65 70 75 80

Leu His Tyr Ser Asp Glu Asp Ile Cys Asn Lys Tyr Asn Gly Ala Val  
 85 90 95

Leu Thr Glu Ser Val Ser Leu Lys Glu Lys Ser Ala Asp Ala Ser Glu  
 100 105 110

Ser Glu Ala Thr Asp Ser Asp Tyr Glu Asp Ala Leu Pro Lys His Ser  
 115 120 125

Phe Val Asn His Tyr Met Ser Asp Pro Thr Tyr Tyr Asn Ser Trp Lys  
 130 135 140

Arg Arg Ala Gln Gly Pro Arg Thr Cys Ala Ala Gln Val Arg Gly Gly  
 145 150 155 160

Gly Gly Leu Arg Gly Gly Arg Ala Ala Ala Pro Gly His His His Ala  
 165 170 175

1126

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Glu Arg Gly Arg Arg Leu His Pro Arg Trp Pro Arg Arg Ala Asn Xaa  
180 185 190

Ala His Arg Leu Leu Leu Leu Arg Val Ser Lys Ala Pro Arg Leu Pro  
195 200 205

Gln Gly Gly Thr Glu Ala Thr Phe Arg Ser Leu Phe Leu Xaa Arg Gln  
210 215 220

Ser Thr Pro Ile Thr Glu Leu Lys Phe Leu Xaa Lys Lys Lys Lys Ile  
225 230 235 240

<210> 1768  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 1768  
Met Tyr Leu Pro Cys Gln Met Ala Cys Ser Leu Phe Val Leu Phe Val  
1 5 10 15

Ile Trp Leu Leu Leu Lys Ile Phe Gln Ala Gly Pro Gln Leu Met Ser  
20 25 30

Leu Ala His Gly Ser Ala Thr Leu Val Leu Asp Gly Met Asn Ile Phe  
35 40 45

Gly Pro Ser Gly Tyr Gly Gln Glu Cys Arg Val Ala Cys Asn Tyr Phe  
50 55 60

Arg Lys Cys Arg Val Pro Ser Trp Ala Arg Cys Leu Met Pro Val Ile  
65 70 75 80

Pro Ala Leu Trp Glu Ala Glu Ala Ala Asp Gln Leu Arg Leu Gly Val  
85 90 95

<210> 1769  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 1769  
Leu Tyr Gln Glu Lys Pro Leu Met Trp Pro Arg Thr Ser Leu Leu Tyr  
1 5 10 15

Val Val Pro Arg Trp Leu Leu Pro Cys Ser Ser Leu Pro Cys Pro Leu  
20 25 30

Pro Glu Ile Lys Asn Ser Leu Thr Glu Lys Lys Lys Lys Lys Lys Lys

Asn Lys Lys Lys Lys Lys Gly Arg Pro  
50 55

<210> 1770  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 1770  
Met Tyr Leu Pro Cys Gln Met Ala Cys Ser Leu Phe Val Leu Phe Val  
1 5 10 15

Ile Trp Leu Leu Leu Lys Ile Phe Gln Ala Gly Pro Gln Leu Met Ser  
20 25 30

Leu Ala His Gly Ser Ala Thr Leu Val Leu Asp Gly Met Asn Ile Phe  
35 40 45

Gly Pro Ser Gly Tyr Gly Gln Glu Cys Arg Val Ala Cys Asn Tyr Phe  
50 55 60

Arg Lys Cys Arg Val Pro Ser Trp Ala Arg Cys Leu Met Pro Val Ile  
65 70 75 80

Pro Ala Leu Trp Glu Ala Glu Ala Gly Arg Ser Ala Glu Val Arg Ser  
85 90 95

Leu Arg Pro Ala Trp Pro Thr Trp  
100

<210> 1771  
<211> 206  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (176)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (180)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (188)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (189)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (198)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (200)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (206)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1771  
 Met Ala Asn Phe Lys Gly His Ala Leu Pro Gly Ser Phe Phe Leu Ile  
   1                  5                  10                  15  
 Ile Gly Leu Cys Trp Ser Val Lys Tyr Pro Leu Lys Tyr Phe Ser His  
                   20                  25                  30  
 Thr Arg Lys Asn Ser Pro Leu His Tyr Tyr Gln Arg Leu Glu Ile Val  
           35                  40                  45  
 Glu Ala Ala Ile Arg Thr Leu Phe Ser Val Thr Val Ser Gly Ile Val  
   50                  55                  60  
 Asp Met Leu Thr Tyr Leu Val Ser His Val Pro Leu Gly Val Asp Arg  
   65                  70                  75                  80  
 Leu Val Met Ala Val Ala Val Phe Met Glu Gly Phe Leu Phe Tyr Tyr  
                   85                  90                  95  
 His Val His Asn Arg Pro Pro Leu Asp Gln His Ile His Ser Leu Leu  
           100                  105                  110  
 Leu Tyr Ala Leu Phe Gly Gly Cys Val Ser Ile Ser Leu Glu Val Ile  
   115                  120                  125  
 Phe Arg Asp His Ile Val Leu Glu Leu Phe Arg Thr Ser Leu Ile Ile  
   130                  135                  140  
 Leu Gln Gly Thr Trp Phe Trp Gln Ile Gly Phe Val Leu Phe Pro Pro  
   145                  150                  155                  160  
 Phe Gly Thr Pro Glu Trp Asp Gln Lys Asp Asp Ala Asn Leu Met Xaa  
           165                  170                  175  
 Ile Thr Met Xaa Phe Cys Cys Thr Thr Trp Leu Xaa Xaa Thr Leu Trp  
           180                  185                  190  
 Pro Gln Leu Phe Ser Xaa Tyr Xaa Leu Phe Asp Ser Asp Xaa  
   195                  200                  205

<210> 1772  
 <211> 275





<212> PRT  
<213> Homo sapiens

<400> 1774  
Met His Gly Met His Ala Ala Gly Thr Gly Thr Glu Leu Thr Leu Ser  
1 5 10 15  
Gly Cys Gln Pro Leu Ser Thr Leu Leu Leu Leu Leu Tyr Tyr Cys  
20 25 30  
Pro Ser Phe Val His Ser Ile Asn Met Cys Lys Ala Ala Ala Leu Ser  
35 40 45  
Leu Pro Trp Ala Ala Gly Gln His Arg Gly Gly Leu Ser Gly Gly Ala  
50 55 60  
Gly Glu Arg Met Ala  
65

<210> 1775  
<211> 69  
<212> PRT  
<213> Homo sapiens

<400> 1775  
Met His Gly Met His Ala Ala Gly Thr Gly Thr Glu Leu Thr Leu Ser  
1 5 10 15  
Gly Cys Gln Pro Leu Ser Thr Leu Leu Leu Leu Leu Tyr Tyr Cys  
20 25 30  
Pro Ser Phe Val His Ser Ile Asn Met Cys Lys Ala Ala Ala Leu Ser  
35 40 45  
Leu Pro Trp Ala Ala Gly Gln His Arg Gly Gly Leu Ser Gly Gly Ala  
50 55 60  
Gly Glu Arg Met Ala  
65

<210> 1776  
<211> 222  
<212> PRT  
<213> Homo sapiens

<400> 1776  
Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu  
1 5 10 15  
Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys  
20 25 30  
Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu  
35 40 45  
Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys Arg Thr Gly



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50

55

60

Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His Cys Ser Ser  
65 70 75 80

Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His Gly Ser Arg  
85 90 95

Leu Lys Asn Cys Asp Leu Tyr Phe Ser Arg Lys Pro Cys Ser Ala Cys  
100 105 110

Leu Lys Met Ile Val Asn Ala Gly Val Asn Arg Ile Ser Tyr Trp Pro  
115 120 125

Ala Asp Pro Glu Ile Ser Leu Leu Thr Glu Ala Ser Ser Ser Glu Asp  
130 135 140

Ala Lys Leu Asp Ala Lys Ala Val Glu Arg Leu Lys Ser Asn Ser Arg  
145 150 155 160

Ala His Val Cys Val Leu Leu Gln Pro Leu Val Cys Tyr Met Val Gln  
165 170 175

Phe Val Glu Glu Thr Ser Tyr Lys Cys Asp Phe Ile Gln Lys Ile Thr  
180 185 190

Lys Thr Leu Pro Asp Ala Asn Thr Asp Phe Tyr Tyr Glu Cys Lys Gln  
195 200 205

Glu Arg Ile Lys Glu Tyr Glu Met Leu Lys Lys Lys Lys Lys  
210 215 220

<210> 1777

<211> 105

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1777

Ile Leu Lys Val Leu Lys Val Trp Ser Phe Gln Leu Phe Gln Ile Ala  
1 5 10 15

Val Cys Asp Phe Ser His Phe Tyr Leu Leu Arg Asn Ile His Lys Ile  
20 25 30

Ile Pro Lys Met Lys Val His Phe Leu Phe Ser Pro Arg Leu Glu Arg  
35 40 45

Gly Gly Leu Gly Cys Phe Met Arg Asn Val Phe Leu Asp Leu Arg Trp

1133

50

55

60

Ser Gly Leu Pro Leu Leu Xaa Phe Pro Ala Phe Pro Pro His His Thr  
65 70 75 80

Ala Ser Leu Gly Phe Leu Pro Val Ser Gln Asn Tyr Thr His Asp His  
85 90 95

Pro Asn Ile Gly Ser Met Pro Xaa Leu  
100 105

&lt;210&gt; 1778

&lt;211&gt; 489

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1778

Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu  
1 5 10 15

Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys  
20 25 30

Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu  
35 40 45

Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys Arg Thr Gly  
50 55 60

Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His Cys Ser Ser  
65 70 75 80

Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His Gly Ser Arg  
85 90 95

Leu Lys Asn Cys Asp Leu Tyr Phe Ser Arg Lys Pro Cys Ser Ala Cys  
100 105 110

Leu Lys Met Ile Val Asn Ala Gly Val Asn Arg Ile Ser Tyr Trp Pro  
115 120 125

Ala Asp Pro Glu Ile Ser Leu Leu Thr Glu Ala Ser Ser Ser Glu Asp  
130 135 140

Ala Lys Leu Asp Ala Lys Ala Val Glu Arg Leu Lys Ser Asn Ser Arg  
145 150 155 160

Ala His Val Cys Val Leu Leu Gln Pro Leu Val Cys Tyr Met Val Gln  
165 170 175

Phe Val Glu Glu Thr Ser Tyr Lys Cys Asp Phe Ile Gln Lys Ile Thr  
180 185 190

Lys Thr Leu Pro Asp Ala Asn Thr Asp Phe Tyr Tyr Glu Cys Lys Gln  
195 200 205

Glu Arg Ile Lys Glu Tyr Glu Met Leu Phe Leu Val Ser Asn Glu Glu  
210 215 220

1134

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Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu  
1 5 10 15  
Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys  
20 25 30  
Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu  
35 40 45  
Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys Arg Thr Gly  
50 55 60  
Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His Cys Ser Ser  
65 70 75 80  
Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His Gly Ser Arg  
85 90 95  
Leu Lys Asn Cys Asp Leu Tyr Phe Ser Arg Lys Pro Cys Ser Ala Cys  
100 105 110  
Leu Lys Met Ile Val Asn Ala Gly Val Asn Arg Ile Ser Tyr Trp Pro  
115 120 125  
Ala Asp Pro Glu Ile Ser Leu Leu Thr Glu Ala Ser Ser Ser Glu Asp  
130 135 140  
Ala Lys Leu Asp Ala Lys Ala Val Glu Arg Leu Lys Ser Asn Ser Arg  
145 150 155 160  
Ala His Val Cys Val Leu Leu Gln Pro Leu Val Cys Tyr Met Val Gln  
165 170 175  
Phe Val Glu Glu Thr Ser Tyr Lys Cys Asp Phe Ile Gln Lys Ile Thr  
180 185 190  
Lys Thr Leu Pro Asp Ala Asn Thr Asp Phe Tyr Tyr Glu Cys Lys Gln  
195 200 205  
Glu Arg Ile Lys Glu Tyr Glu Met Leu Phe Leu Val Ser Asn Glu Glu  
210 215 220  
Met His Lys Gln Ile Leu Met Thr Ile Gly Leu Glu Asn Leu Cys Glu  
225 230 235 240  
Asn Pro Tyr Phe Ser Asn Leu Arg Gln Asn Met Lys Asp Leu Ile Leu  
245 250 255  
Leu Leu Ala Thr Val Ala Ser Met Cys Arg Leu  
260 265

<210> 1780

<211> 196

<212> PRT

<213> Homo sapiens

<220>

<221> SITE







Ala Val Phe Ile Met Ser Tyr Ala Arg Pro Leu Lys Phe Trp Glu Arg	
370	375 380
Asp Tyr Asn Thr Lys Arg Val Asp His Ser Asn Thr Arg Leu Val Thr	
385	390 395 400
Gln Leu Asp Arg Asn Pro Gly Ala Asp Asp Asn Asn Leu Asn Ser Ile	
	405 410 415
Phe Tyr Glu His Leu Thr Arg Ser Leu Gln His Thr Leu Cys Gly Asp	
	420 425 430
Leu Val Leu Gly Arg Trp Gly Asn Tyr Gly Pro Gly Asp Cys Phe Val	
	435 440 445
Leu Ala Ser Asp Tyr Leu Asn Ala Leu Val His Leu Ile Glu Val Gly	
	450 455 460
Asn Gly Leu Val Thr Phe Gln Leu Arg Gly Leu Glu Phe Arg Gly Thr	
465	470 475 480
Tyr Cys Gln Gln Arg Glu Val Glu Ala Ile Thr Glu Gly Val Glu Glu	
	485 490 495
Asp Glu Gly Cys Cys Cys Cys Glu Pro Gly His Leu Pro Arg Val Leu	
	500 505 510
Ser Phe Asn Ala Ala Phe Gly Gln Arg Trp Leu Ala Trp Glu Val Thr	
	515 520 525
Ala Ser Lys Tyr Val Leu Glu Gly Tyr Ser Ile Ser Asp Asn Asn Ala	
	530 535 540
Ala Ser Met Leu Gln Val Phe Asp Leu Arg Lys Ile Leu Ile Thr Tyr	
545	550 555 560
Tyr Val Lys Val Arg Trp Ala Gly Val Ala Gly Gln Gln Gly Pro Cys	
	565 570 575
Gly	

<210> 1783

<211> 177

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (145)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (175)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1783



Met Lys Leu Leu Leu Leu His Pro Ala Phe Gln Ser Cys Leu Leu Leu  
 1 5 10 15  
 Thr Leu Leu Gly Leu Trp Arg Thr Thr Pro Glu Ala His Ala Ser Ser  
 20 25 30  
 Pro Gly Ala Pro Ala Ile Ser Ala Ala Ser Phe Leu Gln Asp Leu Ile  
 35 40 45  
 His Arg Tyr Gly Glu Gly Asp Ser Leu Thr Leu Gln Gln Leu Lys Ala  
 50 55 60  
 Leu Leu Asn His Leu Asp Val Gly Val Gly Arg Gly Asn Val Thr Gln  
 65 70 75 80  
 His Val Gln Gly His Arg Asn Leu Ser Thr Cys Phe Ser Ser Gly Asp  
 85 90 95  
 Leu Phe Thr Ala His Asn Phe Ser Glu Gln Ser Arg Ile Gly Ser Ser  
 100 105 110  
 Glu Leu Gln Glu Phe Cys Pro Thr Ile Leu Gln Gln Leu Asp Ser Arg  
 115 120 125  
 Ala Cys Thr Ser Glu Asn Gln Glu Asn Glu Glu Asn Glu Gln Thr Glu  
 130 135 140  
 Xaa Gly Arg Pro Ser Ala Val Glu Val Trp Gly Tyr Gly Leu Leu Cys  
 145 150 155 160  
 Val Thr Val Ser Pro Ser Ala Pro Ser Trp Gly Pro Ala Trp Xaa Pro  
 165 170 175

Ser

<210> 1784

<211> 492

<212> PRT

<213> Homo. sapiens

<400> 1784

Met Lys Leu Leu Leu Leu His Pro Ala Phe Gln Ser Cys Leu Leu Leu  
 1 5 10 15  
 Thr Leu Leu Gly Leu Trp Arg Thr Thr Pro Glu Ala His Ala Ser Ser  
 20 25 30  
 Pro Gly Ala Pro Ala Ile Ser Ala Ala Ser Phe Leu Gln Asp Leu Ile  
 35 40 45  
 His Arg Tyr Gly Glu Gly Asp Ser Leu Thr Leu Gln Gln Leu Lys Ala  
 50 55 60  
 Leu Leu Asn His Leu Asp Val Gly Val Gly Arg Gly Asn Val Thr Gln  
 65 70 75 80  
 His Val Gln Gly His Arg Asn Leu Ser Thr Cys Phe Ser Ser Gly Asp

1141

85										90					95				
Leu	Phe	Thr	Ala	His	Asn	Phe	Ser	Glu	Gln	Ser	Arg	Ile	Gly	Ser	Ser				
			100					105					110						
Glu	Leu	Gln	Glu	Phe	Cys	Pro	Thr	Ile	Leu	Gln	Gln	Leu	Asp	Ser	Arg				
		115					120					125							
Ala	Cys	Thr	Ser	Glu	Asn	Gln	Glu	Asn	Glu	Glu	Asn	Glu	Gln	Thr	Glu				
		130				135						140							
Glu	Gly	Arg	Pro	Ser	Ala	Val	Glu	Val	Trp	Gly	Tyr	Gly	Leu	Leu	Cys				
145					150					155					160				
Val	Thr	Val	Ile	Ser	Leu	Cys	Ser	Leu	Leu	Gly	Ala	Ser	Val	Val	Pro				
				165					170					175					
Phe	Met	Lys	Lys	Thr	Phe	Tyr	Lys	Arg	Leu	Leu	Leu	Tyr	Phe	Ile	Ala				
			180					185						190					
Leu	Ala	Ile	Gly	Thr	Leu	Tyr	Ser	Asn	Ala	Leu	Phe	Gln	Leu	Ile	Pro				
		195					200					205							
Glu	Ala	Phe	Gly	Phe	Asn	Pro	Leu	Glu	Asp	Tyr	Tyr	Val	Ser	Lys	Ser				
		210				215					220								
Ala	Val	Val	Phe	Gly	Gly	Phe	Tyr	Leu	Phe	Phe	Phe	Thr	Glu	Lys	Ile				
225					230					235					240				
Leu	Lys	Ile	Leu	Leu	Lys	Gln	Lys	Asn	Glu	His	His	His	Gly	His	Ser				
				245					250					255					
His	Tyr	Ala	Ser	Glu	Ser	Leu	Pro	Ser	Lys	Lys	Asp	Gln	Glu	Glu	Gly				
			260					265					270						
Val	Met	Glu	Lys	Leu	Gln	Asn	Gly	Asp	Leu	Asp	His	Met	Ile	Pro	Gln				
		275					280					285							
His	Cys	Ser	Ser	Glu	Leu	Asp	Gly	Lys	Ala	Pro	Met	Val	Asp	Glu	Lys				
		290				295					300								
Val	Ile	Val	Gly	Ser	Leu	Ser	Val	Gln	Asp	Leu	Gln	Ala	Ser	Gln	Ser				
305					310					315					320				
Ala	Cys	Tyr	Trp	Leu	Lys	Gly	Val	Arg	Tyr	Ser	Asp	Ile	Gly	Thr	Leu				
				325					330					335					
Ala	Trp	Met	Ile	Thr	Leu	Ser	Asp	Gly	Leu	His	Asn	Phe	Ile	Asp	Gly				
			340					345					350						
Leu	Ala	Ile	Gly	Ala	Ser	Phe	Thr	Val	Ser	Val	Phe	Gln	Gly	Ile	Ser				
		355					360					365							
Thr	Ser	Val	Ala	Ile	Leu	Cys	Glu	Glu	Phe	Pro	His	Glu	Leu	Gly	Asp				
		370				375					380								
Phe	Val	Ile	Leu	Leu	Asn	Ala	Gly	Met	Ser	Ile	Gln	Gln	Ala	Leu	Phe				
385					390					395					400				
Phe	Asn	Phe	Leu	Ser	Ala	Cys	Cys	Cys	Tyr	Leu	Gly	Leu	Ala	Phe	Gly				

405 410 415  
 Ile Leu Ala Gly Ser His Phe Ser Ala Asn Trp Ile Phe Ala Leu Ala  
 420 425 430  
 Gly Gly Met Phe Leu Tyr Ile Ser Leu Ala Asp Met Phe Pro Glu Met  
 435 440 445  
 Asn Glu Val Cys Gln Glu Asp Glu Arg Lys Gly Ser Ile Leu Ile Pro  
 450 455 460  
 Phe Ile Ile Gln Asn Leu Gly Leu Leu Thr Gly Phe Thr Ile Met Val  
 465 470 475 480  
 Val Leu Thr Met Tyr Ser Gly Gln Ile Gln Ile Gly  
 485 490

<210> 1785  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 1785  
 Met Gly Lys Ile Ser Val Ser Phe Leu Ile Phe Ala Phe Leu Phe Lys  
 1 5 10 15  
 Gly Phe Ser Ile Gly Lys Ala Thr Asp Arg Met Asp Ala Phe Arg Lys  
 20 25 30  
 Ala Lys Asn Arg Ala Val His His Leu His Tyr Ile Glu Arg Tyr Glu  
 35 40 45  
 Asp His Thr Ile Phe His Asp Ile Ser Leu Arg Phe Lys Arg Thr His  
 50 55 60  
 Ile Lys Met Lys Lys Gln Pro Lys Gly Tyr Gly Leu Arg Cys His Arg  
 65 70 75 80  
 Ala Ile Ile Thr Ile Cys Arg Leu Ile Gly Ile Lys Asp Met Tyr Ala  
 85 90 95  
 Lys Val Ser Gly Ser Ile Asn Met Leu Ser Leu Thr Gln Gly Leu Phe  
 100 105 110  
 Arg Gly Leu Ser Arg Gln Glu Thr His Gln Gln Leu Ala Asp Lys Lys  
 115 120 125  
 Gly Leu His Val Val Glu Ile Arg Glu Glu Cys Gly Pro Leu Pro Ile  
 130 135 140  
 Val Val Ala Ser Pro Arg Gly Pro Leu Arg Lys Asp Pro Glu Pro Glu  
 145 150 155 160  
 Asp Glu Val Pro Asp Val Lys Leu Asp Trp Glu Asp Val Lys Thr Ala  
 165 170 175  
 Gln Gly Met Lys Arg Ser Val Trp Ser Asn Leu Lys Arg Ala Ala Thr  
 180 185 190



<222> (25)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (150)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1787

Met	Ile	Gly	Pro	His	Gly	Tyr	Ile	Ser	Ala	Ser	Asp	Trp	Pro	Leu	Met
1				5					10					15	
Ile	Phe	Tyr	Met	Val	Met	Cys	Ile	Xaa	Tyr	Ile	Leu	Tyr	Gly	Ile	Leu
			20					25					30		
Trp	Leu	Thr	Trp	Ser	Ala	Cys	Tyr	Trp	Lys	Asp	Ile	Leu	Arg	Ile	Gln
		35					40					45			
Phe	Trp	Ile	Ala	Ala	Val	Ile	Phe	Leu	Gly	Met	Leu	Glu	Lys	Ala	Val
	50					55					60				
Phe	Tyr	Ser	Glu	Tyr	Gln	Asn	Ile	Ser	Asn	Thr	Gly	Leu	Ser	Thr	Gln
	65				70					75					80
Gly	Leu	Leu	Ile	Phe	Ala	Glu	Leu	Ile	Ser	Ala	Ile	Lys	Arg	Thr	Leu
				85					90					95	
Ala	Arg	Leu	Leu	Val	Ile	Ile	Val	Ser	Leu	Gly	Tyr	Gly	Ile	Val	Lys
			100					105					110		
Pro	Arg	Leu	Gly	Thr	Val	Met	His	Arg	Val	Ile	Gly	Leu	Gly	Leu	Leu
		115				120						125			
Tyr	Leu	Ile	Phe	Ala	Ala	Val	Glu	Gly	Val	Met	Arg	Val	Ile	Gly	Gly
	130					135					140				
Ser	Asn	His	Leu	Ala	Xaa	Gly	Leu	Asp	Asp	Ile	Ile	Leu	Ala	Val	Ile
	145				150					155					160
Asp	Ser	Ile	Phe	Val	Trp	Val									
				165											

<210> 1788

<211> 167

<212> PRT

<213> Homo sapiens

<400> 1788

Met	Ile	Gly	Pro	His	Gly	Tyr	Ile	Ser	Ala	Ser	Asp	Trp	Pro	Leu	Met
1				5					10					15	
Ile	Phe	Tyr	Met	Val	Met	Cys	Ile	Val	Tyr	Ile	Leu	Tyr	Gly	Ile	Leu
			20					25					30		
Trp	Leu	Thr	Trp	Ser	Ala	Cys	Tyr	Trp	Lys	Asp	Ile	Leu	Arg	Ile	Gln
		35					40					45			
Phe	Trp	Ile	Ala	Ala	Val	Ile	Phe	Leu	Gly	Met	Leu	Glu	Lys	Ala	Val
															1145

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50                      55                      60  
 Phe Tyr Ser Glu Tyr Gln Asn Ile Ser Asn Thr Gly Leu Ser Thr Gln  
 65                                      70                                      75                                      80  
 Gly Leu Leu Ile Phe Ala Glu Leu Ile Ser Ala Ile Lys Arg Thr Leu  
                                     85                                      90                                      95  
 Ala Arg Leu Leu Val Ile Ile Val Ser Leu Gly Tyr Gly Ile Val Lys  
                                     100                                      105                                      110  
 Pro Arg Leu Gly Thr Val Met His Arg Val Ile Gly Leu Gly Leu Leu  
                                     115                                      120                                      125  
 Tyr Leu Ile Phe Ala Ala Val Glu Gly Val Met Arg Val Ile Gly Gly  
                                     130                                      135                                      140  
 Ser Asn His Leu Ala Val Val Leu Asp Asp Ile Ile Leu Ala Val Ile  
 145                                      150                                      155                                      160  
 Asp Ser Ile Phe Val Trp Phe  
                                     165

<210> 1789  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 1789  
 Met Val His Tyr Ser Trp Cys Ala Leu Phe Cys His Phe Ala Gln Gly  
                                     1                                      5                                      10                                      15  
 Thr Cys Leu Gln Asn Ser Phe Gln Ser Gly Leu Val Lys Gly Cys Gln  
                                     20                                      25                                      30  
 Gly Ser Thr Gly Gly Asn Gln Gly Ser Phe Gln Ala Ala Lys Met Ser  
                                     35                                      40                                      45  
 Pro Val Cys Tyr Ser Gly His Thr Gly Trp Leu Ser Arg Pro Trp Ala  
                                     50                                      55                                      60  
 Lys Ser Ile Ser Gln Ser Ala Asp Asp Arg Ser Pro Pro Ser Arg Arg  
 65                                      70                                      75                                      80  
 Thr

<210> 1790  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 1790  
 Met Val His Tyr Ser Trp Cys Ala Leu Phe Cys His Phe Ala Gln Gly  
                                     1                                      5                                      10                                      15

Thr Cys Leu Gln Asn Ser Phe Gln Ser Gly Leu Val Lys Gly Cys Gln  
                   20                                  25                                  30  
 Gly Ser Thr Gly Gly Asn Gln Gly Ser Phe Gln Ala Ala Lys Met Ser  
                   35                                  40                                  45  
 Pro Val Cys Tyr Ser Gly His Thr Gly Trp Leu Ser Arg Pro Trp Ala  
                   50                                  55                                  60  
 Lys Ser Ile Ser Gln Ser Ala Asp Asp Arg Ser Pro Pro Ser Arg Arg  
                   65                                  70                                  75                                  80  
 Thr

<210> 1791  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (75)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1791  
 Met Ala Leu Ala Arg Pro Gly Thr Pro Asp Pro Gln Ala Leu Ala Ser  
   1                                  5                                  10                                  15  
 Val Leu Leu Leu Leu Leu Trp Ala Pro Ala Leu Ser Leu Leu Ala Gly  
                   20                                  25                                  30  
 Thr Val Pro Ser Glu Pro Pro Ser Ala Cys Ala Ser Asp Pro Cys Ala  
                   35                                  40                                  45  
 Pro Gly Thr Glu Cys Gln Ala Thr Glu Ser Gly Gly Tyr Thr Cys Gly  
                   50                                  55                                  60  
 Pro Met Glu Pro Arg Gly Cys Ala Thr Gln Xaa Cys His His Gly Ala  
                   65                                  70                                  75                                  80  
 Leu Cys Val Pro Gln Gly Pro Asp Pro Asn Gly Phe Arg Cys Tyr Cys  
                                   85                                  90                                  95  
 Val Pro Gly Phe Gln Gly Pro Arg Cys Glu Leu Asp Ile Asp Glu Cys  
                   100                                  105                                  110  
 Ala Ser Arg Pro Cys His His Gly Ala Thr Leu Pro Xaa Pro Gly Arg  
                   115                                  120                                  125  
 Ser Leu Arg Val Pro Leu Pro Leu Gly Tyr Ala Ala Pro His Leu Asn  
                   130                                  135                                  140







Arg Gly Ser Leu

<210> 1796

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1796

Met Gly Ser Gly Cys Pro Ala Gln Pro Thr Leu Ser Pro Trp Gly Ile  
1 5 10 15

Leu Ser Arg Leu Leu Gly Val Leu Ala Gly Thr Ser Cys Gly Val Ser  
20 25 30

Thr Pro Ala Ala Ala Gln Gly Gly Pro Glu Ile Gly Cys Arg Ala Pro  
35 40 45

His Leu His Leu Ser Gly His Ala Pro Leu Ala Cys Pro Cys Ser Phe  
50 55 60

Leu Pro Thr Ser Leu Gly Gly Val Cys Val Ser Ala Pro Ala Pro Ala  
65 70 75 80

Leu Leu Ser Trp Gly Thr Leu Pro Ala Ile Trp Tyr Trp Gly Cys Pro  
85 90 95

His Cys Leu Val Leu Gly Pro Gly Pro Ala His Ser Gly Leu Ala Leu  
100 105 110

Leu Val Cys Ser  
115

<210> 1797

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1797

Gly Pro Trp Pro Leu Cys Lys Ala Gln Arg Cys Ala Pro Asp Gln Pro  
1 5 10 15

Ser Gly Leu Pro Trp Ala Arg Leu Gly Val Arg Val Ala His Trp Gly  
20 25 30

Gly Gly Gly Leu Ala Arg His Ser Thr Leu Ala Gly Gly Pro Ser Gln  
35 40 45

Arg Glu Pro Cys Arg Leu Arg Trp Ser Trp Pro Leu Ala Gly Cys Pro  
50 55 60

Gly Ser Ala Pro Pro Leu Gln Gly Pro Ser Arg Asn Leu Leu Leu Asn  
65 70 75 80

Gly Lys Ser Tyr Pro Thr Lys Val Arg Leu Ile Arg Gly Gly Ser Leu  
1150

85

90

95

Pro Pro Val Lys Arg Arg Arg Met Asn Trp Ile Asp Ala Pro Asp Asp  
 100 105 110

Val Phe Tyr Met Ala Thr Glu Glu Thr Arg Lys Ile Arg Lys Leu Leu  
 115 120 125

Ser Ser Ser Glu Thr Lys Arg Ala Ala Arg Arg Pro Tyr Lys Pro Ile  
 130 135 140

Ala Leu Arg Gln Ser Gln Ala Leu Pro Pro Arg Pro Pro Pro Pro Ala  
 145 150 155 160

Pro Val Asn Asp Glu Pro Ile Val Ile Glu Asp  
 165 170

&lt;210&gt; 1798

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1798

Met Leu Tyr Pro Arg Ile Phe Thr Asn Arg Gly Glu Leu Leu Pro Phe  
 1 5 10 15

Leu Phe Leu Thr Val Trp Leu Trp Leu Tyr Lys Leu Leu Phe Gly Glu  
 20 25 30

Ser Pro Arg Tyr Pro Asn Val Ile Gly Lys Thr Tyr Phe Phe Trp  
 35 40 45

Thr Asp Gln Ile Ser Arg Glu Ser Arg Phe Leu Glu Arg Leu Ala Phe  
 50 55 60

Ile Val Ser Glu Asn Cys Leu Ile Phe Leu Ile His Ala Ile Thr Gly  
 65 70 75 80

Gln

&lt;210&gt; 1799

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1799

Met Leu Tyr Pro Arg Ile Phe Thr Asn Arg Gly Glu Leu Leu Pro Phe  
 1 5 10 15

Leu Phe Leu Thr Val Trp Leu Trp Leu Tyr Lys Leu Leu Phe Gly Glu  
 20 25 30

Ser Pro Arg Tyr Pro Asn Val Ile Gly Lys Thr Tyr Phe Phe Trp  
 35 40 45

Thr Asp Gln Ile Ser Arg Glu Ser Arg Phe Leu Glu Arg Leu Ala Phe  
 50 55 60  
 Ile Val Ser Glu Asn Cys Leu Ile Phe Leu Ile His Ala Ile Thr Gly  
 65 70 75 80  
 Gln

<210> 1800  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (140)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1800  
 Met Val Leu Leu Trp Ala Ser Val Leu Phe Pro Ala Pro Glu Asp Trp  
 1 5 10 15  
 Ala Glu Leu Gln Gly Ala Val Tyr Arg Leu Leu Val Val Leu Leu Cys  
 20 25 30  
 Cys Leu Ala Thr Arg Lys Leu Pro His Phe Leu His Pro Gln Arg Asn  
 35 40 45  
 Leu Leu Gln Gly Ser Gly Leu Asp Leu Gly Ala Ile Tyr Gln Arg Val  
 50 55 60  
 Glu Gly Phe Ala Ser Gln Pro Glu Ala Ala Leu Arg Ile His Ala Thr  
 65 70 75 80  
 His Leu Gly Arg Ser Pro Pro Pro Arg Ile Gly Ser Gly Leu Lys Ala  
 85 90 95  
 Leu Leu Gln Leu Pro Ala Ser Asp Pro Thr Tyr Trp Ala Thr Ala Tyr  
 100 105 110  
 Phe Asp Val Leu Leu Asp Lys Phe Gln Val Phe Asn Ile Gln Asp Lys  
 115 120 125  
 Asp Arg Ile Ser Ala Met Gln Ser Ile Phe Gln Xaa Thr Arg Thr Leu  
 130 135 140  
 Gly Gly Glu Glu Ser  
 145

<210> 1801  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 1801

Met Val Leu Leu Trp Ala Ser Val Leu Phe Pro Ala Pro Glu Asp Trp  
 1 5 10 15  
 Ala Glu Leu Gln Gly Ala Val Tyr Arg Leu Leu Val Val Leu Leu Cys  
 20 25 30  
 Cys Leu Ala Thr Arg Lys Leu Pro His Phe Leu His Pro Gln Arg Asn  
 35 40 45  
 Leu Leu Gln Gly Ser Gly Leu Asp Leu Gly Ala Ile Tyr Gln Arg Val  
 50 55 60  
 Glu Gly Phe Ala Ser Gln Pro Glu Ala Ala Leu Arg Ile His Ala Thr  
 65 70 75 80  
 His Leu Gly Arg Ser Pro Pro Pro Arg Ile Gly Ser Gly Leu Lys Ala  
 85 90 95  
 Leu Leu Gln Leu Pro Ala Ser Asp Pro Thr Tyr Trp Ala Thr Ala Tyr  
 100 105 110  
 Phe Asp Val Leu Leu Asp Lys Phe Gln Val Phe Asn Ile Gln Asp Lys  
 115 120 125  
 Asp Arg Ile Ser Ala Met Gln Ser Ile Phe Gln Lys Thr Arg Thr Leu  
 130 135 140  
 Gly Gly Glu Glu Ser  
 145

<210> 1802  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 1802  
 Ile Pro Leu Cys Ser Ile Phe Gly Ala Leu Ile Ala Val Cys Leu Ile  
 1 5 10 15  
 Met Gly Leu Phe Asp Gly Cys Phe Ile Ser Ile Met Ala Pro Ile Ala  
 20 25 30  
 Phe Glu Leu Val Gly Ala Gln Asp Val Ser Gln Ala Ile Gly Phe Leu  
 35 40 45  
 Leu Gly Phe Met Ser Ile Pro Met Thr Val Gly Pro Pro Ile Ala Gly  
 50 55 60  
 Leu Leu Arg Asp Lys Leu Gly Ser Tyr Asp Val Ala Phe Tyr Leu Ala  
 65 70 75 80  
 Gly Val Pro Pro Leu Ile Gly Gly Ala Val Leu Cys Phe Ile Pro Trp  
 85 90 95  
 Ile His Ser Lys Lys Gln Arg Glu Ile Ser Lys Thr Thr Gly Lys Glu  
 100 105 110  
 Lys Met Glu Lys Met Leu Glu Asn Gln Asn Ser Leu Leu Ser Ser Ser



<210> 1804  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 1804  
 Met Gly Val Val Ser Leu Val Phe Leu Ile Ile Tyr Tyr Leu Asp Pro  
           1                  5                  10                  15  
 Ser Val Leu Ser Gly Val Ser Cys Phe Val Met Phe Leu Cys Leu Ala  
                   20                  25                  30  
 Asp Tyr Leu Val Pro Ile Leu Ala Pro Arg Ile Phe Gly Ser Asn Lys  
           35                  40                  45  
 Trp Thr Thr Glu Gln Gln Gln Arg Phe His Glu Ile Cys Ser Asn Leu  
           50                  55                  60  
 Val Lys Thr Arg Arg Arg Ala Val Gly Trp Trp Lys Arg Leu Phe Thr  
           65                  70                  75                  80  
 Leu Lys Glu Glu Lys Pro Lys Met Tyr Phe Met Thr Met Ile Val Ser  
                   85                  90                  95  
 Leu Ala Ala Val Ala Trp Val Gly Gln Gln Val His Asn Leu Leu Leu  
                   100                  105                  110  
 Thr Tyr Leu Ile Val Thr Ser Leu Leu Leu Leu Pro Gly Leu Asn Gln  
           115                  120                  125  
 His Gly Ile Ile Leu Lys Tyr Ile Gly Met Ala Lys Arg Glu Ile Asn  
           130                  135                  140  
 Lys Leu Leu Lys Gln Lys Glu Lys Lys Asn Glu  
           145                  150                  155

<210> 1805  
 <211> 202  
 <212> PRT  
 <213> Homo sapiens

<400> 1805  
 Met Ala Glu Gly Asp Asn Arg Ser Thr Asn Leu Leu Ala Ala Glu Thr  
           1                  5                  10                  15  
 Ala Ser Leu Glu Glu Gln Leu Gln Gly Trp Gly Glu Val Met Leu Met  
                   20                  25                  30  
 Ala Asp Lys Val Leu Arg Trp Glu Arg Ala Trp Phe Pro Pro Ala Ile  
           35                  40                  45  
 Met Gly Val Val Ser Leu Val Phe Leu Ile Ile Tyr Tyr Leu Asp Pro  
           50                  55                  60  
 Ser Val Leu Ser Gly Val Ser Cys Phe Val Met Phe Leu Cys Leu Ala  
           65                  70                  75                  80  
 Asp Tyr Leu Val Pro Ile Leu Ala Pro Arg Ile Phe Gly Ser Asn Lys  
                   1155

FOOTNOTES

85

90

95

Trp Thr Thr Glu Gln Gln Gln Arg Phe His Glu Ile Cys Ser Asn Leu  
 100 105 110  
 Val Lys Thr Arg Arg Arg Ala Val Gly Trp Trp Lys Arg Leu Phe Thr  
 115 120 125  
 Leu Lys Glu Glu Lys Pro Lys Met Tyr Phe Met Thr Met Ile Val Ser  
 130 135 140  
 Leu Ala Ala Val Ala Trp Val Gly Gln Gln Val His Asn Leu Leu Leu  
 145 150 155 160  
 Thr Tyr Leu Ile Val Thr Ser Leu Leu Leu Leu Pro Gly Leu Asn Gln  
 165 170 175  
 His Gly Ile Ile Leu Lys Tyr Ile Gly Met Ala Lys Arg Glu Ile Asn  
 180 185 190  
 Lys Leu Leu Lys Gln Lys Lys Lys Lys Lys  
 195 200

&lt;210&gt; 1806

&lt;211&gt; 485

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1806

Ala Arg Lys Pro Arg Ser Gln Ile Lys Asn Glu Ile Asn Ile Asp Thr  
 1 5 10 15  
 Leu Ala Arg Asp Glu Phe Asn Leu Gln Lys Met Met Val Met Val Thr  
 20 25 30  
 Ala Ser Gly Lys Leu Phe Gly Ile Glu Ser Ser Ser Gly Thr Ile Leu  
 35 40 45  
 Trp Lys Gln Tyr Leu Pro Asn Val Lys Pro Asp Ser Ser Phe Lys Leu  
 50 55 60  
 Met Val Gln Arg Thr Thr Ala His Phe Pro His Pro Pro Gln Cys Thr  
 65 70 75 80  
 Leu Leu Val Lys Asp Lys Glu Ser Gly Met Ser Ser Leu Tyr Val Phe  
 85 90 95  
 Asn Pro Ile Phe Gly Lys Trp Ser Gln Val Ala Pro Pro Val Leu Lys  
 100 105 110  
 Arg Pro Ile Leu Gln Ser Leu Leu Leu Pro Val Met Asp Gln Asp Tyr  
 115 120 125  
 Ala Lys Val Leu Leu Leu Ile Asp Asp Glu Tyr Lys Val Thr Ala Phe  
 130 135 140  
 Pro Ala Thr Arg Asn Val Leu Arg Gln Leu His Glu Leu Ala Pro Ser  
 145 150 155 160

1156

FOUO 3345 041201







Arg Gln Ile Pro Leu Gln Ser Leu Asp Leu Glu Phe Gly Ser Gly Phe  
260 265 270

Gln Pro Arg Val Leu Pro Thr Gln Pro Asn Pro Val Asp Ala Ser Arg  
275 280 285

Ala Gln Phe Phe Leu His Leu Ser Pro Ser His Tyr Ala Leu Leu Gln  
290 295 300

Tyr His Tyr Gly Thr Leu Ser Leu Leu Lys Asn Phe Pro Gln Thr Ala  
305 310 315 320

Leu Val Ser Phe Ala Thr Thr Gly Glu Lys Thr Val Ala Ala Val Met  
325 330 335

Ala Cys Arg Asn Glu Val Gln Lys Thr Ser Ser Ser Glu Asp Gly Ser  
340 345 350

Met Gly Glu Leu Phe Gly Glu Val  
355 360

<210> 1808

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1808

Met Arg Gly Ile Tyr Thr Ala Pro Ser Gly Leu Glu Ser Thr Cys Leu  
1 5 10 15

Val Val Ala Tyr Gly Leu Asp Ile Tyr Gln Thr Arg Val Tyr Pro Ser  
20 25 30

Lys Gln Phe Asp Val Leu Lys Asp Asp Tyr Asp Tyr Val Leu Ile Ser  
35 40 45

Ser Val Leu Phe Gly Leu Val Phe Ala Thr Met Ile Thr Lys Arg Leu  
50 55 60

Ala Gln Val Lys Leu Leu Asn Arg Ala Trp Arg  
65 70 75

<210> 1809

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1809

Glu Phe Gly Thr Arg Lys Glu Glu Glu Arg Val Ala Met Val Pro Arg  
1 5 10 15

Leu Ala Phe Ile Leu Phe Val Leu Ala Arg Asp Tyr Asn Val Thr Ser  
20 25 30

Leu Gly Gln Asp Leu Asn Trp Lys Tyr Glu Ala Lys Asp Tyr Arg Lys  
35 40 45



<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1811

Met His Leu Gly Leu Val Ser Leu Ile Leu Phe Cys Gln Ala Leu Glu  
1 5 10 15

Val Asp Ile Ser Leu Gln Gly Pro Gly Ile Val Pro Gly Arg Ser Glu  
20 25 30

Val Ser Leu Ser Leu Gln Gly Pro Arg Gly Gly Gly Cys Phe Pro Ile  
35 40 45

Ala Thr Gly Ala Pro Phe Ile Val Leu Leu Pro Leu Gly Leu Tyr Leu  
50 55 60

Val Phe His Leu Cys Cys Phe Phe Gly Leu Phe Cys Ala Xaa Leu Arg  
65 70 75 80

Leu Arg Glu Pro Gly Trp Asp His Leu Ile Ile  
85 90

<210> 1812

<211> 230

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1812

Met Gly Asn Ser Leu Ser Val Phe Cys Ser Trp Phe Cys Arg Arg Ser  
1 5 10 15

Trp Pro Cys His Arg Gln Pro Ala Arg Leu Val Arg Glu Ala Phe Pro  
20 25 30

Ala Gly Arg Ala His Pro Ala Ala Pro Ala Pro Val Pro Ala Arg Gly  
35 40 45

Ile Val Gly Arg Phe Pro Leu Leu Phe Asn Arg Gln Arg His Xaa Gly  
50 55 60

Pro Xaa Phe Pro Val Arg Trp Asp Gly Ala Pro Met Arg Leu Cys Leu  
65 70 75 80

Ile Pro Arg Asn Thr Gly Thr Pro Gln Arg Val Leu Arg Pro Val Val  
85 90 95

Trp Ser Pro Pro Ser Arg Lys Lys Pro Val Leu Ser Pro His Asn Ser  
100 105 110



[illegible]

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<400> 1814
Met Gln Ile Gln Val Ala Gly Leu Leu Gln Phe Ala Val Pro Leu Phe
  1                               10                      15

Ser Thr Ala Glu Glu Asp Leu Leu Ala Ile Gln Leu Leu Leu Asn Ser
      20                      25                      30

Ser Glu Ser Ser Leu His Gln Leu Thr Ala Met Val Asp Cys Arg Gly
      35                      40                      45

Leu His Lys Asp Tyr Leu Asp Ala Leu Ala Gly Ile Cys Tyr Asp Gly
      50                      55                      60

Leu Gln Gly Leu Leu Tyr Leu Gly Leu Phe Ser Phe Leu Ala Ala Leu
      65                      70                      75                      80

Ala Phe Ser Thr Met Ile Cys Ala Gly Pro Arg Ala Trp Lys His Phe
      85                      90                      95

Thr Thr Arg Asn Arg Asp Tyr Asp Asp Ile Asp Asp Asp Asp Pro Phe
      100                      105                      110

Asn Pro Gln Ala Trp Arg Met Ala Ala His Ser Pro Pro Arg Gly Gln
      115                      120                      125

Leu His Ser Phe Cys Ser Tyr Ser Ser Gly Leu Gly Ser Gln Thr Ser
      130                      135                      140

Leu Gln Pro Pro Ala Gln Thr Ile Ser Asn Ala Pro
      145                      150                      155

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1163





Gly Ser Thr Ser Ser Arg Ala Ala Ala Thr Ala Val  
 20 25

<210> 1817  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1817  
 Met Leu Asn Pro Leu Arg Gln Leu Phe Lys Leu Met Ala Ser Leu Phe  
 1 5 10 15  
 Leu Ser Val Phe Thr Leu Gly Leu Pro Phe Ala Leu Phe Gln Tyr Tyr  
 20 25 30  
 Ala Tyr Thr Gln Phe Cys Leu Pro Gly Ser Ala Arg Pro Ile Pro Glu  
 35 40 45  
 Pro Leu Val Gln Leu Ala Val Asp Lys Gly Tyr Arg Ile Ala Glu Gly  
 50 55 60  
 Asn Glu Pro Leu Gly Ala Ser Gly Met Phe His  
 65 70 75

<210> 1818  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (94)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (95)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1818  
 Met His Ser Gln Cys Gln Gly Phe Phe Ser Ser Leu Thr Met Leu Asn  
 1 5 10 15  
 Pro Leu Arg Gln Leu Phe Lys Leu Met Ala Ser Leu Phe Leu Ser Val  
 20 25 30  
 Phe Thr Leu Gly Leu Pro Phe Ala Leu Phe Gln Tyr Tyr Ala Tyr Thr  
 35 40 45  
 Gln Phe Cys Leu Pro Gly Ser Ala Arg Pro Ile Pro Glu Pro Leu Val  
 50 55 60  
 Gln Leu Ala Val Asp Lys Gly Tyr Arg Ile Ala Glu Gly Asn Glu Pro  
 65 70 75 80

Pro Trp Cys Phe Trp Asp Val Pro Leu Ile Tyr Ser Tyr Xaa Xaa Asp  
85 90 95

Val Tyr Trp Asn Val Gly Phe Leu Lys Tyr Tyr Glu Leu Lys Gln Val  
100 105 110

Pro Asn Phe Leu Leu Ala Ala Pro Val Ala Ile Leu Val Ala Trp Ala  
115 120 125

Thr Trp Thr Tyr Val Thr Thr His Pro Trp Leu Cys Leu Thr Leu Gly  
130 135 140

Leu Gln Arg Ser Lys Asn Asn Lys Thr Leu Glu Lys Pro Asp Leu Gly  
145 150 155 160

Phe Leu Ser Pro Gln Val Phe Val Tyr Val Val His Ala Ala Val Leu  
165 170 175

Leu Leu Phe Gly Gly Leu Cys Met His Val Gln Val Leu Thr Arg Phe  
180 185 190

Leu Gly Ser Ser Thr Pro Ile Met Tyr Trp Phe Pro Ala His Leu Leu  
195 200 205

Gln Asp Gln Glu Pro Leu Leu Arg Ser Leu Lys Thr Val Pro Trp Lys  
210 215 220

Pro Leu Ala Glu Asp Ser Pro Pro Gly Gln Lys Val Pro Arg Asn Pro  
225 230 235 240

Ile Met Gly Leu Leu Tyr His Trp Lys Thr Cys Ser Pro Val Thr Arg  
245 250 255

Tyr Ile Leu Gly Tyr Phe Leu Thr Tyr Trp Leu Leu Gly Leu Leu Leu  
260 265 270

His Cys Asn Phe Leu Pro Trp Thr  
275 280

<210> 1819  
<211> 273  
<212> PRT  
<213> Homo sapiens

<400> 1819  
Met Leu Phe Phe Cys Gly Asp Leu Leu Ser Arg Ser Gln Ile Phe Tyr  
1 5 10 15

Tyr Ser Thr Gly Met Thr Val Gly Ile Val Ala Ser Leu Leu Ile Ile  
20 25 30

Ile Phe Ile Leu Ser Lys Phe Met Pro Lys Lys Ser Pro Ile Tyr Val  
35 40 45

Ile Leu Val Gly Gly Trp Ser Phe Ser Leu Tyr Leu Ile Gln Leu Val  
50 55 60

Phe Lys Asn Leu Gln Glu Ile Trp Arg Cys Tyr Trp Gln Tyr Leu Leu  
1166





115	120	125
His Ile Ala Leu Ala Ile Ile Ile Ile Ala Leu Cys Thr Lys Asn Leu 130 135 140		
Glu His Pro Ile Gln Trp Leu Tyr Ile Thr Cys Arg Lys Val Cys Lys 145 150 155 160		
Gly Ala Glu Lys Pro Val Pro Pro Arg Leu Leu Thr Glu Glu Glu Tyr 165 170 175		
Arg Ile Gln Gly Glu Val Glu Thr Arg Lys Ala Leu Glu Glu Leu Arg 180 185 190		
Glu Phe Cys Asn Ser Pro Asp Cys Ser Ala Trp Lys Thr Val Ser Arg 195 200 205		
Ile Gln Ser Pro Lys Arg Phe Ala Asp Phe Val Glu Gly Ser Ser His 210 215 220		
Leu Thr Pro Asn Glu Val Ser Val His Glu Gln Glu Tyr Gly Leu Gly 225 230 235 240		
Ser Ile Ile Ala Gln Asp Glu Ile Tyr Glu Glu Ala Ser Ser Glu Glu 245 250 255		
Glu Asp Ser Tyr Ser Arg Cys Pro Ala Ile Thr Gln Asn Asn Phe Leu 260 265 270		

Thr

<210> 1822  
<211> 273  
<212> PRT  
<213> Homo sapiens

<400> 1822  
Met Leu Phe Phe Cys Gly Asp Leu Leu Ser Arg Ser Gln Ile Phe Tyr  
1 5 10 15  
Tyr Ser Thr Gly Met Thr Val Gly Ile Val Ala Ser Leu Leu Ile Ile  
20 25 30  
Ile Phe Ile Leu Ser Lys Phe Met Pro Lys Lys Ser Pro Ile Tyr Val  
35 40 45  
Ile Leu Val Gly Gly Trp Ser Phe Ser Leu Tyr Leu Ile Gln Leu Val  
50 55 60  
Phe Lys Asn Leu Gln Glu Ile Trp Arg Cys Tyr Trp Gln Tyr Leu Leu  
65 70 75 80  
Ser Tyr Val Leu Thr Val Gly Phe Met Ser Phe Ala Val Cys Tyr Lys  
85 90 95  
Tyr Gly Pro Leu Glu Asn Glu Arg Ser Ile Asn Leu Leu Thr Trp Thr  
100 105 110





Ser Gly Leu His Ser Ile Glu Tyr Ser Ser Arg Thr Ala Cys  
85 90

<210> 1826  
<211> 94  
<212> PRT  
<213> Homo sapiens

<400> 1826  
Met Leu Leu Gly Phe Leu Val Leu Ile Pro Trp Gly Ser Leu Ile Leu  
1 5 10 15  
Gly Ser Ser Asp Leu Asp Pro Ser Ser Leu Pro Leu Gly Thr Arg Gly  
20 25 30  
His Gly Trp Arg Trp Pro Pro Leu Ser Pro Val Gln Ile Leu Tyr Pro  
35 40 45  
Leu Ala Gly Asp Pro His Ala Ala Val Ser Cys Ser Cys Cys Gly Glu  
50 55 60  
Thr Glu Leu Arg Ala Leu Leu Thr Gly Ser Leu Pro Met Glu Ala Phe  
65 70 75 80  
Ser Gly Leu His Ser Ile Glu Tyr Ser Ser Arg Thr Ala Cys  
85 90

<210> 1827  
<211> 261  
<212> PRT  
<213> Homo sapiens

<400> 1827  
Met Ala Val Thr Ala Cys Gln Gly Leu Gly Phe Val Val Ser Leu Ile  
1 5 10 15  
Gly Ile Ala Gly Ile Ile Ala Ala Thr Cys Met Asp Gln Trp Ser Thr  
20 25 30  
Gln Asp Leu Tyr Asn Asn Pro Val Thr Ala Val Phe Asn Tyr Gln Gly  
35 40 45  
Leu Trp Arg Ser Cys Val Arg Glu Ser Ser Gly Phe Thr Glu Cys Arg  
50 55 60  
Gly Tyr Phe Thr Leu Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg  
65 70 75 80  
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val  
85 90 95  
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser  
100 105 110  
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser  
115 120 125











195 200 205  
 Gly Thr Cys Gln Tyr Val Leu Thr Lys Asp Cys Ser Ser Pro Ala Ser  
 210 215 220  
 Pro Phe Gln Val Leu Val Lys Asn Asp Ala Arg Arg Thr Arg Ser Phe  
 225 230 235 240  
 Ser Trp Thr Lys Ser Val Glu Leu Val Leu Gly Glu Thr Gly Ser Ala  
 245 250 255  
 Cys Ser Ser Thr Ser Pro Cys Ala Gly Thr Ala Xaa Ala Ser  
 260 265 270

<210> 1833  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (104)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (147)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (151)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (176)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (179)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1833  
 Met Leu Trp Phe Ser Gly Val Gly Ala Leu Ala Glu Arg Tyr Cys Arg  
 1 5 10 15

Arg Ser Pro Gly Ile Thr Cys Cys Val Leu Leu Leu Leu Asn Cys Ser-  
 20 25 30

Gly Val Pro Met Ser Leu Ala Ser Ser Phe Leu Thr Gly Ser Val Ala  
 35 40 45

Lys Cys Glu Asn Glu Gly Glu Val Leu Gln Ile Pro Phe Ile Thr Asp  
 50 55 60

Asn Pro Cys Ile Met Cys Val Cys Leu Asn Lys Glu Val Thr Cys Lys



<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (332)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (443)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1835

Met Leu Trp Phe Ser Gly Val Gly Ala Leu Ala Glu Arg Tyr Cys Arg  
1 5 10 15

Arg Ser Pro Gly Ile Thr Cys Cys Val Leu Leu Leu Leu Asn Cys Ser  
20 25 30

Gly Val Pro Met Ser Leu Ala Ser Ser Phe Leu Thr Gly Ser Val Ala  
35 40 45

Lys Cys Glu Asn Glu Gly Glu Val Leu Gln Ile Pro Phe Ile Thr Asp  
50 55 60

Asn Pro Cys Ile Met Cys Val Cys Leu Asn Lys Glu Val Thr Cys Lys  
65 70 75 80

Arg Glu Lys Cys Pro Val Leu Ser Arg Asp Cys Ala Leu Ala Ile Lys  
85 90 95

Gln Arg Gly Ala Cys Cys Glu Gln Cys Lys Gly Cys Thr Tyr Glu Gly  
100 105 110

Asn Thr Tyr Asn Ser Ser Phe Lys Trp Gln Ser Pro Ala Glu Pro Cys  
115 120 125

Val Leu Arg Gln Cys Gln Glu Gly Val Val Thr Glu Ser Gly Val Arg  
130 135 140

Cys Val Xaa His Cys Lys Asn Pro Leu Glu His Leu Gly Met Cys Cys  
145 150 155 160

Pro Thr Cys Pro Gly Cys Val Phe Glu Gly Val Gln Tyr Gln Glu Gly  
165 170 175

Glu Glu Phe Gln Pro Glu Gly Ser Lys Cys Thr Lys Cys Ser Cys Thr  
180 185 190

Gly Gly Arg Thr Gln Cys Val Arg Glu Val Cys Pro Ile Leu Ser Cys  
195 200 205

Pro Gln His Leu Ser His Ile Pro Pro Gly Gln Cys Cys Pro Lys Cys  
210 215 220

Leu Gly Gln Arg Lys Val Phe Asp Leu Pro Phe Gly Ser Cys Leu Phe  
225 230 235 240

Arg Ser Asp Val Tyr Asp Asn Gly Ser Ser Phe Leu Tyr Asp Asn Cys  
245 250 255

Thr Ala Cys Thr Cys Arg Asp Ser Thr Val Val Cys Lys Arg Lys Cys  
 260 265 270  
 Ser His Pro Gly Gly Cys Asp Gln Gly Gln Glu Gly Cys Cys Glu Xaa  
 275 280 285  
 Cys Leu Leu Arg Xaa Pro Pro Glu Asp Ile Lys Val Cys Lys Phe Gly  
 290 295 300  
 Asn Lys Ile Phe Gln Asp Gly Glu Met Trp Ser Ser Ile Asn Cys Thr  
 305 310 315 320  
 Ile Cys Ala Cys Val Lys Gly Arg Thr Glu Cys Xaa Asn Lys Gln Cys  
 325 330 335  
 Ile Pro Ile Ser Ser Cys Pro Gln Gly Lys Ile Leu Asn Arg Lys Gly  
 340 345 350  
 Cys Cys Pro Ile Cys Thr Glu Lys Pro Gly Val Cys Thr Val Phe Gly  
 355 360 365  
 Asp Pro His Tyr Asn Thr Phe Asp Gly Arg Thr Phe Asn Phe Gln Gly  
 370 375 380  
 Thr Cys Gln Tyr Val Leu Thr Lys Asp Cys Ser Ser Pro Ala Ser Pro  
 385 390 395 400  
 Phe Gln Val Leu Val Lys Asn Asp Ala Arg Arg Thr Arg Ser Phe Ser  
 405 410 415  
 Trp Thr Lys Ser Val Glu Leu Val Leu Gly Glu Thr Gly Ser Ala Cys  
 420 425 430  
 Ser Ser Thr Ser Pro Cys Ala Gly Thr Ala Xaa Ala Ser  
 435 440 445

<210> 1836  
 <211> 370  
 <212> PRT  
 <213> Homo sapiens

<400> 1836  
 Leu Gly Gly Ala Arg Val Arg Arg Ala Val Gly Leu Ser Gly Thr Gly  
 1 5 10 15  
 Ala Glu Ala Gly Arg Ala Gly Ala Met Val Glu Lys Glu Glu Ala Gly  
 20 25 30  
 Gly Gly Ile Ser Glu Glu Glu Ala Ala Gln Tyr Asp Arg Gln Ile Arg  
 35 40 45  
 Leu Trp Gly Leu Glu Ala Gln Lys Arg Leu Arg Ala Ser Arg Val Leu  
 50 55 60  
 Leu Val Gly Leu Lys Gly Leu Gly Ala Glu Ile Ala Lys Asn Leu Ile  
 65 70 75 80



Leu Ala Gly Val Lys Gly Leu Thr Met Leu Asp His Glu Gln Val Thr  
 85 90 95  
 Pro Glu Asp Pro Gly Ala Gln Phe Leu Ile Arg Thr Gly Ser Val Gly  
 100 105 110  
 Arg Asn Arg Ala Glu Ala Ser Leu Glu Arg Ala Gln Asn Leu Asn Pro  
 115 120 125  
 Met Val Asp Val Lys Val Asp Thr Glu Asp Ile Glu Lys Lys Pro Glu  
 130 135 140  
 Ser Phe Phe Thr Gln Phe Asp Ala Val Cys Leu Thr Cys Cys Ser Arg  
 145 150 155 160  
 Asp Val Ile Val Lys Val Asp Gln Ile Cys His Lys Asn Ser Ile Lys  
 165 170 175  
 Phe Phe Thr Gly Asp Val Phe Gly Tyr His Gly Tyr Thr Phe Ala Asn  
 180 185 190  
 Leu Gly Glu His Glu Phe Val Glu Glu Lys Thr Lys Val Ala Lys Val  
 195 200 205  
 Ser Gln Gly Val Glu Asp Gly Pro Asp Thr Lys Arg Ala Lys Leu Asp  
 210 215 220  
 Ser Ser Glu Thr Thr Met Val Lys Lys Lys Val Val Phe Cys Pro Val  
 225 230 235 240  
 Lys Glu Ala Leu Glu Val Asp Trp Ser Ser Glu Lys Ala Lys Ala Ala  
 245 250 255  
 Leu Lys Arg Thr Thr Ser Asp Tyr Phe Leu Leu Gln Val Leu Leu Lys  
 260 265 270  
 Phe Arg Thr Asp Lys Gly Arg Asp Pro Ser Ser Asp Thr Tyr Glu Glu  
 275 280 285  
 Asp Ser Glu Leu Leu Leu Gln Ile Arg Asn Asp Val Leu Asp Ser Leu  
 290 295 300  
 Gly Ile Ser Pro Asp Leu Leu Pro Glu Asp Phe Val Arg Tyr Cys Phe  
 305 310 315 320  
 Ser Glu Met Ala Pro Val Cys Ala Val Val Gly Gly Ile Leu Ala Gln  
 325 330 335  
 Glu Ile Val Lys Ala Leu Ser Gln Arg Asp Pro Pro His Asn Asn Phe  
 340 345 350  
 Phe Phe Phe Asp Gly Met Lys Gly Asn Gly Ile Val Glu Cys Leu Gly  
 355 360 365  
 Pro Lys  
 370

<210> 1837





Asn Gly Ile Val Glu Cys Leu Gly Pro Lys  
340 345

<210> 1840  
<211> 155  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (92)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (105)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (125)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (130)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1840  
Met Gln His Gln Leu His Leu Leu Ile Cys Trp Gly Lys Gly Ser Lys  
1 5 10 15

Ser Asn Thr Ser Cys Leu Gly Pro Val Leu Ser Cys Ser Asn Met Trp  
20 25 30

Ser Leu Ala Leu Leu Val Val Ala Gly Ser Met Gly Val Ala Tyr Ser  
35 40 45

Ser Val Val Met Tyr Val Leu Leu Trp Val Pro Leu Pro Leu Pro Ser  
50 55 60

His Phe Leu Pro Ser Gly Ala Pro Glu Ala Gln Pro Thr Thr Trp Ala  
65 70 75 80

Gln Ser Pro His Ser Val Cys Lys Cys Gly Thr Xaa Leu Gly Pro Ala  
85 90 95

Lys Pro Gln Gly Pro Ser Leu Pro Xaa Pro Pro Cys Leu Ile Met Leu  
100 105 110

Leu Ser Cys Arg Arg Gln Leu Gly Leu Ala Pro Ser Xaa Trp Leu Pro  
115 120 125

Gly Xaa Gly Ser His Gly Gly Glu Leu Arg Gly Cys Ser Gln Gly Trp  
130 135 140

Ala Pro Gly Ile Ala His Leu Asn Ile Cys Thr



145                      150                      155                      160  
 Ala Gln Leu Gly Cys Tyr Leu Glu Tyr Asp Leu Phe Gly Thr Glu Leu  
                                  165                      170                      175  
 Leu His Tyr Gln Leu Gly Pro Asp Ile Asp Met Pro Asp Asp Asn Lys  
                                  180                      185                      190  
 Arg Ile Arg Arg Val Arg Leu Leu Val Glu Glu Gly Cys Glu Asp Arg  
                                  195                      200                      205  
 Ile Leu Val Ala His Asp Ile His Thr Lys Thr Arg Leu Met Lys Tyr  
                                  210                      215                      220  
 Gly Gly His Gly Tyr Ser His Ile Leu Thr Asn Val Val Pro Lys Met  
                                  225                      230                      235                      240  
 Leu Leu Arg Gly Ile Thr Glu Asn Val Leu Asp Lys Ile Leu Ile Glu  
                                  245                      250                      255  
 Asn Pro Lys Gln Trp Leu Thr Phe Lys  
                                  260                      265

<210> 1843  
 <211> 503  
 <212> PRT  
 <213> Homo sapiens

<400> 1843  
 Met Glu Gln Arg His Val Leu Leu Lys Gln Lys Glu Leu Gly Gly Glu  
                                  1                      5                      10                      15  
 Glu Pro Glu Pro Ser Leu Arg Glu Gly Pro Gly Gly Leu Val Met Glu  
                                  20                      25                      30  
 Gly His Leu Phe Lys Arg Ala Ser Asn Ala Phe Lys Thr Trp Ser Arg  
                                  35                      40                      45  
 Arg Trp Phe Thr Ile Gln Ser Asn Gln Leu Val Tyr Gln Lys Lys Tyr  
                                  50                      55                      60  
 Lys Asp Pro Val Thr Val Val Val Asp Asp Leu Arg Leu Cys Thr Val  
                                  65                      70                      75                      80  
 Lys Leu Cys Pro Asp Ser Glu Arg Arg Phe Cys Phe Glu Val Val Ser  
                                  85                      90                      95  
 Thr Ser Lys Ser Cys Leu Leu Gln Ala Asp Ser Glu Arg Leu Leu Gln  
                                  100                      105                      110  
 Leu Trp Val Ser Ala Val Gln Ser Ser Ile Ala Ser Ala Phe Ser Gln  
                                  115                      120                      125  
 Ala Arg Leu Asp Asp Ser Pro Arg Gly Pro Gly Gln Gly Ser Gly His  
                                  130                      135                      140  
 Leu Ala Ile Gly Ser Ala Ala Thr Leu Gly Ser Gly Gly Met Ala Arg  
                                  145                      150                      155                      160

Gly Arg Glu Pro Gly Gly Val Gly His Val Val Ala Gln Val Gln Ser  
165 170 175

Val Asp Gly Asn Ala Gln Cys Cys Asp Cys Arg Glu Pro Ala Pro Glu  
180 185 190

Trp Ala Ser Ile Asn Leu Gly Val Thr Leu Cys Ile Gln Cys Ser Gly  
195 200 205

Ile His Arg Ser Leu Gly Val His Phe Ser Lys Val Arg Ser Leu Thr  
210 215 220

Leu Asp Ser Trp Glu Pro Glu Leu Val Lys Leu Met Cys Glu Leu Gly  
225 230 235 240

Asn Val Ile Ile Asn Gln Ile Tyr Glu Ala Arg Val Glu Ala Met Ala  
245 250 255

Val Lys Lys Pro Gly Pro Ser Cys Ser Arg Gln Glu Lys Glu Ala Trp  
260 265 270

Ile His Ala Lys Tyr Val Glu Lys Lys Phe Leu Thr Lys Leu Pro Glu  
275 280 285

Ile Arg Gly Arg Arg Gly Gly Arg Gly Arg Pro Arg Gly Gln Pro Pro  
290 295 300

Val Pro Pro Lys Pro Ser Ile Arg Pro Arg Pro Gly Ser Leu Arg Ser  
305 310 315 320

Lys Pro Glu Pro Pro Ser Glu Asp Leu Gly Ser Leu His Pro Gly Ala  
325 330 335

Leu Leu Phe Arg Ala Ser Gly His Pro Pro Ser Leu Pro Thr Met Ala  
340 345 350

Asp Ala Leu Ala His Gly Ala Asp Val Asn Trp Val Asn Gly Gly Gln  
355 360 365

Asp Asn Ala Thr Pro Leu Ile Gln Ala Thr Ala Ala Asn Ser Leu Leu  
370 375 380

Ala Cys Glu Phe Leu Leu Gln Asn Gly Ala Asn Val Asn Gln Ala Asp  
385 390 395 400

Ser Ala Gly Arg Gly Pro Leu His His Ala Thr Ile Leu Gly His Thr  
405 410 415

Gly Leu Ala Cys Leu Phe Leu Lys Arg Gly Ala Asp Leu Gly Ala Arg  
420 425 430

Asp Ser Glu Gly Arg Asp Pro Leu Thr Ile Ala Met Glu Thr Ala Asn  
435 440 445

Ala Asp Ile Val Thr Leu Leu Arg Leu Ala Lys Met Arg Glu Ala Glu  
450 455 460

Ala Ala Gln Gly Gln Ala Gly Asp Glu Thr Tyr Leu Asp Ile Phe Arg  
465 470 475 480

Asp Phe Ser Leu Met Ala Ser Asp Asp Pro Glu Lys Leu Ser Arg Arg  
 485 490 495

Ser His Asp Leu His Thr Leu  
 500

<210> 1844  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 1844  
 Met Ser Pro Ser Ile Arg Ile Leu Leu Val Leu Gln Gln Leu Gly Ser  
 1 5 10 15

Leu Met Ala Pro Leu Pro Ser Ala His  
 20 25

<210> 1845  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 1845  
 Met Ser Pro Ser Ile Arg Ile Leu Leu Val Leu Gln Gln Leu Gly Ser  
 1 5 10 15

Leu Met Ala Pro Leu Pro Ser Ala His  
 20 25

<210> 1846  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 1846  
 Val Phe Gln Ile Tyr Leu  
 1 5

<210> 1847  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 1847  
 Val Phe Gln Ile Tyr Leu  
 1 5

<210> 1848



<211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 1848

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Met Leu Val Leu Leu Leu Asp Phe Leu Gly Leu Val His Leu Gly Gln
 1             5             10             15

Leu Leu Ile Phe His Ile Tyr Leu Lys Ala Lys Lys Met Thr Thr Phe
          20             25             30

Glu Tyr Leu Ile Asn Asn Arg Lys Glu Glu Ser Ser Lys His Gln Ala
          35             40             45

Val Arg Lys Asp Pro Tyr Val Gln Met Asp Lys Gly Val Leu Gln Gln
          50             55             60

Gly Ala Gly Ala Leu Gly Ser Ser Ala Gln Gly Val Lys Ala Lys Ser
          65             70             75             80

Ser Leu Leu Ile His Lys His Leu Cys His Phe Cys Thr Ser Val Asn
          85             90             95

Gln Asp Gly Asp Ser Thr Ala Arg Val His Leu
          100             105
  
```

<210> 1849

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1849

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Met Leu Gln Ala Arg Asn Gln Ser Pro Ser Ser Gln Arg Pro Leu Asp
 1             5             10             15

Val Leu Arg Arg Asn Gln Asp Pro Gln Ser Pro Ala Ser Ile Ser Val
          20             25             30

Ile Ile Phe Ile Thr Pro Lys Glu Glu Pro Ala Leu Gln Glu Gly Leu
          35             40             45

His Leu Gln Glu Asp Gly Leu Pro Ala Thr Ala Glu Asp Ala Ala Thr
          50             55             60

Cys Leu Thr Val Leu Ser Ser Gln Pro Ala Ser Cys Arg Ala Ser Cys
          65             70             75             80

Cys Leu Arg Ala Asp Gly Pro Gly Met Leu Ala His Thr Cys Glu His
          85             90             95

Ser Thr Gly Lys Trp Glu His Ser Thr Arg Lys Trp Glu His Ser Thr
          100             105             110

Gly Lys Trp Glu His Ser Thr Gly Lys Trp Gly Leu Thr Ala Leu Gln
          115             120             125

Asn Gly Ser Thr Val Leu Gly Asn Gly Ser Thr Val Leu Gly Ser Gly
          130             135             140
  
```



50	55	60
Glu Lys Glu Ala Leu Glu Gln Val Ala Glu Glu Gly Arg Gln Gln Asn 65 70 75 80		
Glu Thr Arg Val Ala Trp Asp Leu Trp Ser Thr Leu Cys Met Ile Leu 85 90 95		
Phe Leu Met Ile Glu Val Trp Arg Gln Asp His Gln Glu Gly Pro Ser 100 105 110		
Pro Glu Cys Leu Gly Gly Glu Glu Asp Glu Leu Pro Gly Trp Gly Ala 115 120 125		
Pro Pro Cys Arg Ala Ser Pro Xaa Pro Thr Arg His Ala Cys His Phe 130 135 140		
Tyr Glu Arg Cys Ile Arg Gly Ala Thr Ala Asp Ala Ala Arg Thr Arg 145 150 155 160		
Xaa Phe Leu Glu Gly Phe Val Asp Xaa Leu Leu Glu Ala Leu Arg Ser 165 170 175		
Leu Cys Asn Arg Asp Thr Asp Met Glu Val Glu Asp Phe Ile Gly Val 180 185 190		
Asp Ser Met Tyr Xaa Asn Trp Gln Val Asp Arg Pro Leu Leu Cys His 195 200 205		
Leu		

<210> 1851

<211> 547

<212> PRT

<213> Homo sapiens

<400> 1851

Met Ala Met Gly Leu Phe Arg Val Cys Leu Val Val Val Thr Ala Ile 1 5 10 15
Ile Asn His Pro Leu Leu Phe Pro Arg Glu Asn Ala Thr Val Pro Glu 20 25 30
Asn Glu Glu Glu Ile Ile Arg Lys Met Gln Ala His Gln Glu Lys Leu 35 40 45
Gln Leu Glu Gln Leu Arg Leu Glu Glu Glu Val Ala Arg Leu Ala Ala 50 55 60
Glu Lys Glu Ala Leu Glu Gln Val Ala Glu Glu Gly Arg Gln Gln Asn 65 70 75 80
Glu Thr Arg Val Ala Trp Asp Leu Trp Ser Thr Leu Cys Met Ile Leu 85 90 95
Phe Leu Met Ile Glu Val Trp Arg Gln Asp His Gln Glu Gly Pro Ser 100 105 110

1191

Pro Glu Cys Leu Gly Gly Glu Glu Asp Glu Leu Pro Gly Leu Gly Gly  
115 120 125

Ala Pro Leu Gln Gly Leu Thr Leu Pro Asn Lys Ala Thr Leu Gly His  
130 135 140

Phe Tyr Glu Arg Cys Ile Arg Gly Ala Thr Ala Asp Ala Ala Arg Thr  
145 150 155 160

Arg Glu Phe Leu Glu Gly Phe Val Asp Asp Leu Leu Glu Ala Leu Arg  
165 170 175

Ser Leu Cys Asn Arg Asp Thr Asp Met Glu Val Glu Asp Phe Ile Gly  
180 185 190

Val Asp Ser Met Tyr Glu Asn Trp Gln Val Asp Arg Pro Leu Leu Cys  
195 200 205

His Leu Phe Val Pro Phe Thr Pro Pro Glu Pro Tyr Arg Phe His Pro  
210 215 220

Glu Leu Trp Cys Ser Gly Arg Ser Val Pro Leu Asp Arg Gln Gly Tyr  
225 230 235 240

Gly Gln Ile Lys Val Val Arg Ala Asp Gly Asp Thr Leu Ser Cys Ile  
245 250 255

Cys Gly Lys Thr Lys Leu Gly Glu Asp Met Leu Cys Leu Leu His Gly  
260 265 270

Arg Asn Ser Met Ala Pro Pro Cys Gly Asp Met Glu Asn Leu Leu Cys  
275 280 285

Ala Thr Asp Ser Leu Tyr Leu Asp Thr Met Gln Val Met Lys Trp Phe  
290 295 300

Gln Thr Ala Leu Thr Arg Ala Trp Lys Gly Ile Ala His Lys Tyr Glu  
305 310 315 320

Phe Asp Leu Ala Phe Gly Gln Leu Asp Ser Pro Gly Ser Leu Lys Ile  
325 330 335

Lys Phe Arg Ser Gly Lys Phe Met Pro Phe Asn Leu Ile Pro Val Ile  
340 345 350

Gln Cys Asp Asp Ser Asp Leu Tyr Phe Val Ser His Leu Pro Arg Glu  
355 360 365

Pro Ser Glu Gly Thr Pro Ala Ser Ser Thr Asp Trp Leu Leu Ser Phe  
370 375 380

Ala Val Tyr Glu Arg His Phe Leu Arg Thr Thr Leu Lys Ala Leu Pro  
385 390 395 400

Glu Gly Ala Cys His Leu Ser Cys Leu Gln Ile Ala Ser Phe Leu Leu  
405 410 415

Ser Lys Gln Ser Arg Leu Thr Gly Pro Ser Gly Leu Ser Ser Tyr His  
420 425 430







His Ala Pro Ala Ser Asp Asp Thr Pro Glu Phe Cys Ala Ala Leu Arg  
 50 55 60  
 Ser Tyr Ala Leu Cys Thr Arg Arg Thr Ala Arg Thr Cys Arg Gly Asp  
 65 70 75 80  
 Leu Ala Tyr His Ser Ala Val His Gly Ile Glu Asp Leu Met Ser Gln  
 85 90 95  
 His Asn Cys Ser Lys Asp Gly Pro Thr Ser Gln Pro Arg Leu Arg Thr  
 100 105 110  
 Leu Pro Pro Ala Gly Asp Ser Gln Glu Arg Ser Asp Ser Pro Glu Ile  
 115 120 125  
 Cys His Tyr Glu Lys Ser Phe His Lys His Ser Xaa Thr Pro Asn Tyr  
 130 135 140  
 Thr His Cys Gly Leu Phe Gly Asp Pro His Leu Arg Thr Phe Thr Asp  
 145 150 155 160  
 Arg Phe Gln Thr Cys Lys Val Gln Gly Ala Trp Pro Leu Ile Asp Asn  
 165 170 175  
 Asn Tyr Leu Asn Val Gln Val Thr Asn Thr Pro Val Leu Pro Gly Ser  
 180 185 190  
 Ala Ala Thr Ala Thr Ser Lys Leu Thr Ile Ile Phe Lys Asn Phe Gln  
 195 200 205  
 Glu Cys Val Asp Gln Lys Val Tyr Gln Ala Glu Met Asp Glu Leu Pro  
 210 215 220  
 Ala Ala Phe Val Asp Gly Ser Lys Asn Gly Gly Asp Lys His Gly Ala  
 225 230 235 240  
 Asn Ser Leu Lys Ile Thr Glu Lys Val Ser Gly Gln His Val Glu Ile  
 245 250 255  
 Gln Ala Lys Tyr Ile Gly Thr Thr Ile Val Val Arg Gln Val Gly Arg  
 260 265 270  
 Tyr Leu Thr Phe Ala Val Arg Met Pro Glu Glu Val Val Asn Ala Val  
 275 280 285  
 Glu Asp Trp Asp Ser Gln Gly Leu Tyr Leu Cys Leu Arg Gly Cys Pro  
 290 295 300  
 Leu Asn Gln Gln Ile Asp Phe Gln Ala Phe His Thr Asn Ala Glu Gly  
 305 310 315 320  
 Thr Gly Ala Arg Xaa Leu Ala Ala Xaa Ser Leu Asp Pro Gln Xaa Pro  
 325 330 335  
 Arg Xaa Xaa His Thr Arg Gln Ala Val Ala Lys Cys Lys Glu Lys Leu  
 340 345 350  
 Pro Val Glu Asp Leu  
 355





Tyr Leu Thr Phe Ala Val Arg Met Pro Glu Glu Val Val Asn Ala Val  
 275 280 285  
 Glu Asp Trp Asp Ser Gln Gly Leu Tyr Leu Cys Leu Arg Gly Cys Pro  
 290 295 300  
 Leu Asn Gln Gln Ile Asp Phe Gln Ala Phe His Thr Asn Ala Glu Gly  
 305 310 315 320  
 Thr Gly Ala Arg Arg Leu Ala Ala Ala Ser Pro Ala Pro Thr Ala Pro  
 325 330 335  
 Glu Thr Phe Pro Tyr Glu Thr Ala Val Ala Lys Cys Lys Glu Lys Leu  
 340 345 350  
 Pro Val Glu Asp Leu Tyr Tyr Gln Ala Cys Val Phe Asp Leu Leu Thr  
 355 360 365  
 Thr Gly Asp Val Asn Phe Thr Leu Ala Ala Tyr Tyr Ala Leu Glu Asp  
 370 375 380  
 Val Lys Met Leu His Ser Asn Lys Asp Lys Leu His Leu Tyr Glu Arg  
 385 390 395 400  
 Thr Arg Asp Leu Pro Gly Arg Ala Ala Ala Gly Leu Pro Leu Ala Pro  
 405 410 415  
 Arg Pro Leu Leu Gly Ala Leu Val Pro Leu Leu Ala Leu Leu Pro Val  
 420 425 430  
 Phe Cys

<210> 1856  
 <211> 712  
 <212> PRT  
 <213> Homo sapiens

<400> 1856  
 Met Gly Gln Gly Leu Lys Ala Trp Pro Arg Tyr Arg Val Val Gly Ser  
 1 5 10 15  
 Ala Asp Ala Gly Gln Tyr Asn Leu Glu Ile Thr Asp Ala Glu Leu Ser  
 20 25 30  
 Asp Asp Ala Ser Tyr Glu Cys Gln Ala Thr Glu Ala Ala Leu Arg Ser  
 35 40 45  
 Arg Arg Ala Lys Leu Thr Val Leu Ile Pro Pro Glu Asp Thr Arg Ile  
 50 55 60  
 Asp Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu  
 65 70 75 80  
 Thr Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe  
 85 90 95  
 Arg Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu

100										105										110										
Lys	Asp	Gly	Lys	Arg	Glu	Thr	Thr	Val	Ser	Gln	Leu	Leu	Ile	Asn	Pro															
		115						120					125																	
Thr	Asp	Leu	Asp	Ile	Gly	Arg	Val	Phe	Thr	Cys	Arg	Ser	Met	Asn	Glu															
		130				135					140																			
Ala	Ile	Pro	Ser	Gly	Lys	Glu	Thr	Ser	Ile	Glu	Leu	Asp	Val	His	His															
		145			150					155					160															
Pro	Pro	Thr	Val	Thr	Leu	Ser	Ile	Glu	Pro	Gln	Thr	Val	Gln	Glu	Gly															
				165					170					175																
Glu	Arg	Val	Val	Phe	Thr	Cys	Gln	Ala	Thr	Ala	Asn	Pro	Glu	Ile	Leu															
			180					185					190																	
Gly	Tyr	Arg	Trp	Ala	Lys	Gly	Gly	Phe	Leu	Ile	Glu	Asp	Ala	His	Glu															
		195					200					205																		
Ser	Arg	Tyr	Glu	Thr	Asn	Val	Asp	Tyr	Ser	Phe	Phe	Thr	Glu	Pro	Val															
		210				215					220																			
Ser	Cys	Glu	Val	His	Asn	Lys	Val	Gly	Ser	Thr	Asn	Val	Ser	Thr	Leu															
		225			230					235					240															
Val	Asn	Val	His	Phe	Ala	Pro	Arg	Ile	Val	Val	Asp	Pro	Lys	Pro	Thr															
				245					250				255																	
Thr	Thr	Asp	Ile	Gly	Ser	Asp	Val	Thr	Leu	Thr	Cys	Val	Trp	Val	Gly															
			260					265					270																	
Asn	Pro	Pro	Leu	Thr	Leu	Thr	Trp	Thr	Lys	Lys	Asp	Ser	Asn	Met	Gly															
		275					280					285																		
Pro	Arg	Pro	Pro	Gly	Ser	Pro	Pro	Glu	Ala	Ala	Leu	Ser	Ala	Gln	Val															
		290				295					300																			
Leu	Ser	Asn	Ser	Asn	Gln	Leu	Leu	Leu	Lys	Ser	Val	Thr	Gln	Ala	Asp															
		305			310					315					320															
Ala	Gly	Thr	Tyr	Thr	Cys	Arg	Ala	Ile	Val	Pro	Arg	Ile	Gly	Val	Ala															
				325					330					335																
Glu	Arg	Glu	Val	Pro	Leu	Tyr	Val	Asn	Gly	Pro	Pro	Ile	Ile	Ser	Ser															
			340					345					350																	
Glu	Ala	Val	Gln	Tyr	Ala	Val	Arg	Gly	Asp	Gly	Gly	Lys	Val	Glu	Cys															
		355					360					365																		
Phe	Ile	Gly	Ser	Thr	Pro	Pro	Pro	Asp	Arg	Ile	Ala	Trp	Ala	Trp	Lys															
		370				375					380																			
Glu	Asn	Phe	Leu	Glu	Val	Gly	Thr	Leu	Glu	Arg	Tyr	Thr	Val	Glu	Arg															
		385			390					395					400															
Thr	Asn	Ser	Gly	Ser	Gly	Val	Leu	Ser	Thr	Leu	Thr	Ile	Asn	Asn	Val															
			405						410					415																
Met	Glu	Ala	Asp	Phe	Gln	Thr	His	Tyr	Asn	Cys	Thr	Ala	Trp	Asn	Ser															

420										425										430									
Phe	Gly	Pro	Gly	Thr	Ala	Ile	Ile	Gln	Leu	Glu	Glu	Arg	Glu	Val	Leu														
		435					440					445																	
Pro	Val	Gly	Ile	Ile	Ala	Gly	Ala	Thr	Ile	Gly	Ala	Ser	Ile	Leu	Leu														
		450				455					460																		
Ile	Phe	Phe	Phe	Ile	Ala	Leu	Val	Phe	Phe	Leu	Tyr	Arg	Arg	Arg	Lys														
465					470					475					480														
Gly	Ser	Arg	Lys	Asp	Val	Thr	Leu	Arg	Lys	Leu	Asp	Ile	Lys	Val	Glu														
				485					490					495															
Thr	Val	Asn	Arg	Glu	Pro	Leu	Thr	Met	His	Ser	Asp	Arg	Glu	Asp	Asp														
			500					505					510																
Thr	Ala	Ser	Val	Ser	Thr	Ala	Thr	Arg	Val	Met	Lys	Ala	Ile	Tyr	Ser														
		515					520					525																	
Ser	Phe	Lys	Asp	Asp	Val	Asp	Leu	Lys	Gln	Asp	Leu	Arg	Cys	Asp	Thr														
		530				535					540																		
Ile	Asp	Thr	Arg	Glu	Glu	Tyr	Glu	Met	Lys	Asp	Pro	Thr	Asn	Gly	Tyr														
545					550					555					560														
Tyr	Asn	Val	Arg	Ala	His	Glu	Asp	Arg	Pro	Ser	Ser	Arg	Ala	Val	Leu														
				565					570					575															
Tyr	Ala	Asp	Tyr	Arg	Ala	Pro	Gly	Pro	Ala	Arg	Phe	Asp	Gly	Arg	Pro														
			580					585					590																
Ser	Ser	Arg	Leu	Ser	His	Ser	Ser	Gly	Tyr	Ala	Gln	Leu	Asn	Thr	Tyr														
		595					600					605																	
Ser	Arg	Gly	Pro	Ala	Ser	Asp	Tyr	Gly	Pro	Glu	Pro	Thr	Pro	Pro	Gly														
		610				615					620																		
Pro	Ala	Ala	Pro	Ala	Gly	Thr	Asp	Thr	Thr	Ser	Gln	Leu	Ser	Tyr	Glu														
625					630					635					640														
Asn	Tyr	Glu	Lys	Phe	Asn	Ser	His	Pro	Phe	Pro	Gly	Ala	Ala	Gly	Tyr														
				645					650					655															
Pro	Thr	Tyr	Arg	Leu	Gly	Tyr	Pro	Gln	Ala	Pro	Pro	Ser	Gly	Leu	Glu														
			660					665					670																
Arg	Thr	Pro	Tyr	Glu	Ala	Tyr	Asp	Pro	Ile	Gly	Lys	Tyr	Ala	Thr	Ala														
		675					680					685																	
Thr	Arg	Phe	Ser	Tyr	Thr	Ser	Gln	His	Ser	Asp	Tyr	Gly	Gln	Arg	Phe														
		690				695					700																		
Gln	Gln	Arg	Met	Gln	Thr	His	Val																						
705					710																								

<210> 1857

<211> 81







<210> 1863  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1863  
 Met Ala Ser Tyr Lys Thr Leu Lys Met Leu Phe Ser Cys Leu Leu Thr  
     1                    5                    10                    15  
 Cys Ser Val Ser Asn Glu Gln Tyr Ala Val Ile Phe Asn Phe Phe Pro  
                     20                    25                    30  
 Leu Tyr Ile Cys Phe Leu Ser Asp Cys Phe Lys Cys Phe Ser Leu Ser  
                     35                    40                    45  
 Leu Val Leu Ser Asn Leu Ile Ile Ile Tyr Leu Gly Val Ile Phe Phe  
                     50                    55                    60  
 Ile Phe Phe Val Leu Asp Ile His Arg Ser Ser  
                     65                    70                    75

<210> 1864  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1864  
 Met Arg Leu Cys Gln Arg Pro Gly Leu Val Leu Ala Leu Pro Pro Gln  
     1                    5                    10                    15  
 Leu Ser Phe Ser Thr Ala Arg Gly Gly Asp Ser Arg Met Leu Gly Leu  
                     20                    25                    30  
 Pro Leu Gly Arg Xaa Thr Ser Gly Lys Val Gln Gly Asp Ser Thr Thr  
                     35                    40                    45  
 Val Lys Leu Arg Phe Gly Leu Gln Leu Gly Val Leu Gly Gln Arg  
                     50                    55                    60

<210> 1865  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 1865  
 Gly Gln Arg Gly Arg Pro Ala Ala Thr Ser His Arg Ile Leu Ser Ser  
     1                    5                    10                    15







Cys Val Cys Val Phe Asn Ser Ser Val Cys Lys Leu Phe  
85 90

<210> 1870  
<211> 304  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (98)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (166)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (231)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1870  
Met Ser Ser Ser Glu Met Trp Thr Val Leu Trp His Arg Phe Ser Met  
1 5 10 15

Val Leu Arg Leu Pro Glu Glu Ala Ser Ala Gln Glu Gly Glu Leu Ser  
20 25 30

Leu Ser Ser Pro Pro Ser Pro Glu Pro Asp Trp Thr Leu Ile Ser Pro  
35 40 45

Gln Gly Ile Phe Leu Ser His Gly Ser Ile Leu Met Ser Ile Leu Lys  
50 55 60

His Leu Leu Cys Pro Ser Phe Leu Asn Gln Leu Arg Gln Ala Pro His  
65 70 75 80

Gly Ser Glu Phe Leu Pro Val Val Val Leu Ser Val Cys Gln Leu Leu  
85 90 95

Cys Xaa Pro Phe Ala Leu Asp Met Asp Ala Asp Leu Leu Ile Asp Val  
100 105 110

Leu Ala Asp Leu Arg Asp Ser Glu Val Ala Ala His Leu Leu Gln Val  
115 120 125

Cys Cys Tyr His Leu Pro Leu Met Gln Val Glu Leu Pro Ile Ser Leu  
130 135 140

Leu Thr Arg Leu Ala Leu Met Asp Pro Thr Ser Leu Asn Gln Phe Val  
145 150 155 160

Asn Thr Val Ser Ala Xaa Pro Arg Thr Ile Val Ser Phe Leu Ser Val  
165 170 175

Ala Leu Leu Ser Asp Gln Pro Leu Leu Thr Ser Asp Leu Leu Ser Leu





<211> 193  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (53)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1873  
 Met Gly Pro Leu Ser Pro Ala Arg Thr Leu Arg Leu Trp Gly Pro Arg  
   1                  5                  10                  15  
 Ser Leu Gly Val Ala Leu Gly Val Phe Met Thr Ile Gly Phe Ala Leu  
           20                  25                  30  
 Gln Leu Leu Gly Gly Pro Phe Gln Arg Arg Leu Pro Gly Leu Gln Leu  
           35                  40                  45  
 Arg Gln Pro Ser Xaa Pro Ser Leu Arg Pro Ala Leu Pro Ser Cys Pro  
           50                  55                  60  
 Pro Arg Gln Arg Leu Val Phe Leu Lys Thr His Lys Ser Gly Ser Ser  
           65                  70                  75                  80  
 Ser Val Leu Ser Leu Leu His Arg Tyr Gly Asp Gln His Gly Leu Arg  
                   85                  90                  95  
 Phe Ala Leu Pro Ala Arg Tyr Gln Phe Gly Tyr Pro Lys Leu Phe Gln  
                   100                  105                  110  
 Ala Ser Arg Val Lys Gly Tyr Arg Pro Gln Gly Gly Gly Thr Gln Leu  
           115                  120                  125  
 Pro Phe His Ile Leu Cys His His Met Arg Phe Asn Leu Lys Glu Val  
           130                  135                  140  
 Leu Gln Val Met Pro Ser Asp Ser Phe Phe Phe Ser Ile Val Arg Asp  
           145                  150                  155                  160  
 Pro Ala Ala Leu Ala Arg Ser Ala Phe Ser Tyr Tyr Lys Ser Thr Ser  
                   165                  170                  175  
 Ser Ala Phe Arg Lys Ser Pro Ser Leu Ala Ala Phe Leu Ala Asn Pro  
           180                  185                  190

Arg

<210> 1874  
 <211> 461  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids



















<400> 1885

Met	His	Arg	Leu	Ala	Pro	His	Cys	Ser	Phe	Ala	Arg	Trp	Leu	Leu	Cys
1				5					10					15	
Asn	Gly	Ser	Leu	Phe	Arg	Tyr	Lys	His	Pro	Ser	Glu	Glu	Glu	Leu	Arg
			20					25					30		
Ala	Leu	Ala	Gly	Lys	Pro	Arg	Pro	Arg	Gly	Arg	Lys	Glu	Arg	Trp	Ala
		35					40					45			
Asn	Gly	Leu	Ser	Glu	Glu	Lys	Pro	Leu	Ser	Val	Pro	Arg	Asp	Ala	Pro
	50					55					60				
Phe	Gln	Leu	Glu	Thr	Cys	Pro	Leu	Thr	Thr	Val	Asp	Ala	Leu	Val	Leu
65					70					75					80
Arg	Phe	Phe	Leu	Glu	Tyr	Gln	Trp	Phe	Val	Asp	Phe	Ala	Val	Tyr	Ser
			85						90					95	
Gly	Gly	Val	Tyr	Leu	Phe	Thr	Glu	Ala	Tyr	Tyr	Tyr	Met	Leu	Gly	Pro
			100					105					110		
Ala	Lys	Glu	Thr	Asn	Ile	Ala	Val	Phe	Trp	Cys	Leu	Leu	Thr	Val	Thr
		115					120					125			
Phe	Ser	Ile	Lys	Met	Phe	Leu	Thr	Val	Thr	Arg	Leu	Tyr	Phe	Ser	Ala
	130					135					140				
Glu	Glu	Gly	Gly	Glu	Arg	Ser	Val	Cys	Leu	Thr	Phe	Ala	Phe	Leu	Phe
145					150					155					160
Leu	Leu	Leu	Ala	Met	Leu	Val	Gln	Val	Val	Arg	Xaa	Glu	Thr	Leu	Glu
				165					170					175	
Leu	Gly	Leu	Asp	Leu	Ala	Gly	Ser	Met	Thr	Gln	Asn	Leu	Glu	Pro	Leu
		180						185					190		
Leu	Lys	Lys	Gln	Xaa	Xaa	Asp	Trp	Ala	Leu	Pro	Val	Xaa	Lys	Leu	Leu
		195					200					205			
Ser	Arg	Asp	Cys	Met	Xaa	Leu	Gly	Trp	Cys	Phe	Tyr	Phe	Ser	Trp	Val
	210					215					220				
Ala	Thr	Arg	Xaa	Cys	Ile	Glu	Lys	Xaa	Tyr	Leu	Xaa	Lys	Ser	Val	Cys
225					230					235					240
Thr	Gly														

<210> 1886

<211> 479

<212> PRT

<213> Homo sapiens

<400> 1886

Met	Ala	Val	Leu	Gly	Val	Gln	Leu	Val	Val	Thr	Leu	Leu	Thr	Ala	Thr
1				5						10				15	







<210> 1888  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 1888  
 Met Arg His His Thr Trp Leu Ile Phe Leu Ile Leu Ile Phe Val Glu  
 1 5 10 15  
 Met Gly Gly Gln Val Ser Leu Cys Cys Pro Gly Cys Ser Arg Thr Pro  
 20 25 30  
 Gly His Lys Pro Ser Ser His Leu Ser Leu Pro Met Arg Arg Asn Tyr  
 35 40 45  
 Arg Trp Leu Arg Cys Glu Pro Pro Cys Leu Ala Phe Leu His Tyr Leu  
 50 55 60  
 Glu Ile Arg Trp Glu Glu Ala Phe Phe Trp Val Gly Leu Arg Arg His  
 65 70 75 80  
 Thr Glu Val Pro Gln Val Ile Gly Ala Gly Pro Leu Pro Phe Ser Pro  
 85 90 95  
 Pro Trp Val Val Val Asp Arg Ser Leu Gly Trp Asp Gly Glu Glu Arg  
 100 105 110  
 Ser Cys Cys Val Ser Cys Leu Leu Phe Lys  
 115 120

<210> 1889  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1889  
 Met Glu Leu Val Phe Leu Ile Ile Ser Leu Val Cys Gln His Cys Ser  
 1 5 10 15  
 Pro Asp Ser Ala Gly Asp Leu Cys Val Gln Thr Pro Ser Val Trp Pro  
 20 25 30  
 Arg Thr Leu Met Glu Ile Met Leu Ser Ser Leu Gly Glu Phe Ala Leu  
 35 40 45  
 Ser Asn Asn Gln Arg Phe Val Cys Phe Asn Asn Ile His Ser Ser Trp  
 50 55 60  
 Ala Trp Trp Leu Thr Ser Val Ile Pro Ala Leu Trp Glu Ala Asp Thr  
 65 70 75 80  
 Gly Gly Leu Leu Glu Ala Arg Ser Leu Arg Pro Ala  
 85 90

<210> 1890

[illegible]

Met Glu Leu Val Phe Leu Ile Ile Ser Leu Val Cys Gln His Cys Ser  
1 5 10 15

Arg Thr Leu Met Glu Ile Met Leu Ser Ser Leu Gly Glu Phe Ala Leu  
35 40 45

Ser Asn Asn Gln Arg Phe Val Cys Phe Asn Asn Ile His Ser Ser Trp  
50 55 60

Ala Trp Trp Leu Thr Ser Val Ile Pro Ala Leu Trp Glu Ala Asp Thr  
65 70 75 80

Gly Gly Leu Leu Glu Ala Arg Ser Leu Arg Pro Ala  
85 90

<211> 99

<212> PRT

<213> Homo sapiens

 $\langle 220 \rangle$ 

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

Met Phe Ala Phe Ser Pro Leu Ser Arg Leu Ala Met Leu Gly Val Cys  
1 5 10 15

Cys Gly Cys Cys Leu Gly Leu Phe Leu Glu Ser Asp Thr Gly Ile Asn  
20 25 30

Phe Leu Asn Phe Asn Tyr Leu Ala Ser Tyr Ser Trp Ser Ser Arg Ser  
35 40 45

Ser Asn Phe Asn Asn Leu Gly Ile Phe Ser Phe Phe Phe Glu Thr  
50 55 60

Glu Ser Arg Ser Val Ala Gln Ala Gly Val Gln Trp His Tyr Leu Ser  
65 70 75 80

Ser Leu Gln Ala Leu Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Xaa  
85 90 95

Pro Thr Glu

<210> 1892

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1892  
 Met Phe Ala Phe Ser Pro Leu Ser Arg Leu Ala Met Leu Gly Val Cys  
   1                  5                  10                  15  
 Cys Gly Cys Cys Leu Gly Leu Phe Leu Glu Ser Asp Thr Gly Ile Asn  
                   20                  25                  30  
 Phe Leu Asn Phe Asn Tyr Leu Ala Ser Tyr Ser Trp Ser Ser Arg Ser  
           35                  40                  45  
 Ser Asn Phe Asn Asn Leu Gly Ile Phe Ser Phe Phe Phe Phe Glu Thr  
       50                  55                  60  
 Glu Ser Arg Ser Val Ala Gln Ala Gly Val Gln Trp His Tyr Leu Ser  
   65                  70                  75                  80  
 Ser Leu Gln Ala Leu Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser  
                   85                  90                  95  
 Leu Pro Ser Ser  
           100

<210> 1893  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (140)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1893  
 Met Leu Gln Gly His Ser Ser Val Phe Gln Ala Leu Leu Gly Thr Phe  
   1                  5                  10                  15  
 Phe Thr Trp Gly Met Thr Ala Ala Gly Ala Ala Leu Val Phe Val Phe  
           20                  25                  30  
 Ser Ser Gly Gln Arg Arg Ile Leu Asp Gly Ser Leu Gly Phe Ala Ala  
       35                  40                  45  
 Gly Val Met Leu Ala Ala Ser Tyr Trp Ser Leu Leu Ala Pro Ala Val  
   50                  55                  60  
 Glu Met Ala Thr Ser Ser Gly Gly Phe Gly Ala Phe Ala Phe Phe Pro  
   65                  70                  75                  80  
 Val Ala Val Gly Phe Thr Leu Gly Ala Ala Phe Val Tyr Leu Ala Asp  
           85                  90                  95  
 Leu Leu Met Pro His Leu Gly Ala Ala Glu Asp Pro Gln Thr Ala Leu  
       100                  105                  110



<210> 1895  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1895  
 Met Lys Glu Gln Ser Leu Pro Ser Phe Leu Trp Lys Met Leu Leu Trp  
   1                  5                 10                 15  
 Tyr Cys Leu Val Cys Cys Asp Thr Leu Glu Ser Phe Val Ser Val Phe  
                   20                 25                 30  
 Ser Leu Tyr Pro Gly Thr Ala Leu Gly Ile Trp Glu Ala Leu Thr Val  
           35                 40                 45  
 Tyr Gly Arg Cys Ala Gln Phe Phe Cys Phe Gln Gly Ala Lys Glu Val  
       50                 55                 60  
 Ala Val His Met Glu Thr Phe Leu Phe Leu Glu Cys Glu Gly Trp Gly  
   65                 70                 75                 80  
 Pro Lys Gln Val Pro Asn Ala Ala Ala Phe Leu Leu Val  
                  85                 90

<210> 1896  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 1896  
 Ala Arg Ala Leu Gly Leu Phe Val Ser Met Phe Ser Leu Thr Asn Pro  
   1                  5                 10                 15  
 Ser Pro Val Leu Ser Ala Leu Leu Gly Tyr Thr Gln Leu Asn Asn Leu  
           20                 25                 30  
 Val His Phe Leu Val Trp Glu Pro Leu  
       35                 40

<210> 1897  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1897  
 Met Lys Glu Gln Ser Leu Pro Ser Phe Leu Trp Lys Met Leu Leu Trp  
   1                  5                 10                 15  
 Tyr Cys Leu Val Cys Cys Asp Thr Leu Glu Ser Phe Val Ser Val Phe  
           20                 25                 30  
 Ser Leu Tyr Pro Gly Thr Ala Leu Gly Ile Trp Glu Ala Leu Thr Val  
       35                 40                 45  
 Tyr Gly Arg Cys Ala Gln Phe Phe Cys Phe Gln Gly Ala Lys Glu Val  
       50                 55                 60



&lt;400&gt; 1899

Ile Ser His Val Leu Ile Asp Ala Tyr Ile Ser Leu Lys Arg Ile Lys  
 1 5 10 15

Ser Ser Cys Asn Pro Thr Thr Leu Gly Met Cys Ser Glu Asp Leu Leu  
 20 25 30

Arg Leu Cys His Trp Ser  
 35

&lt;210&gt; 1900

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1900

Met Thr Ser Ile Trp His Arg Pro Val Cys Pro Leu Ser Trp Leu Val  
 1 5 10 15

Pro Ser Ala Ala Phe Ser Asn Trp Gly Pro Gly Cys Arg Ala Val Cys  
 20 25 30

Ser Pro Arg Trp Ala Thr Pro Ala Lys Ile Pro Thr Pro Lys Cys Asp  
 35 40 45

Arg Val Ala His Glu Glu Gly Ser Ala Leu Arg Val Pro Ser Arg Val  
 50 55 60

His Ser Ser Ser Gln Leu Leu Arg Val Ala Pro Ala Ser Pro Thr Ser  
 65 70 75 80

Ser Leu Ser Pro Val Met Ser Arg  
 85

&lt;210&gt; 1901

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1901

Met Thr Ser Ile Trp His Arg Pro Val Cys Pro Leu Ser Trp Leu Val  
 1 5 10 15

Pro Ser Ala Ala Phe Ser Asn Trp Gly Pro Gly Cys Arg Ala Val Cys  
 20 25 30

Ser Pro Arg Trp Ala Thr Pro Ala Lys Ile Pro Thr Pro Lys Cys Asp  
 35 40 45

Arg Val Ala His Glu Glu Gly Ser Ala Leu Arg Val Pro Ser Arg Val  
 50 55 60

His Ser Ser Ser Gln Leu Leu Arg Val Ala Pro Ala Ser Pro Thr Ser  
 65 70 75 80





35

40

45

Glu Arg Trp Arg Gln Leu Thr Ala Ala Ala Arg Thr Val Ser Arg Val  
 50 55 60  
 Arg Ser Ala Ala Gly Trp Gly Ser Trp Pro Cys Pro Ala Ser Met Asn  
 65 70 75 80  
 Ser Cys Pro Arg Thr Val Cys Leu Trp Asn Leu Arg Ser Ile Tyr Cys  
 85 90 95  
 Val Cys Ser Ser Arg Leu Ser Thr Ser Cys Arg Lys Ser Pro Arg Ile  
 100 105 110  
 Thr Met Pro Thr Gln  
 115

<210> 1904

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1904

Met Trp Arg Val Ser Ile Ser Val Pro Trp Leu Trp Ser Ala Trp Pro  
 1 5 10 15  
 Ile Ser Ser Val Gly Phe Leu Cys Leu Pro Ala Ser Pro His Pro Ser  
 20 25 30  
 Leu Pro Pro Ser Ser Thr Leu His Asp Leu Ala Val Thr Ser Gly Pro  
 35 40 45  
 Glu Arg Trp Arg Gln Leu Thr Ala Ala Ala Arg Thr Val Ser Arg Val  
 50 55 60  
 Arg Ser Ala Ala Gly Trp Gly Ser Trp Pro Cys Pro Ala Ser Met Asn  
 65 70 75 80  
 Ser Cys Pro Arg Thr Val Cys Leu Trp Asn Leu Arg Ser Ile Tyr Cys  
 85 90 95  
 Val Cys Ser Ser Arg Leu Ser Thr Ser Cys Arg Lys Ser Pro Arg Ile  
 100 105 110  
 Thr Met Pro Thr Gln  
 115

<210> 1905

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids



Thr Lys Ile Lys Lys Leu Lys Val Ser Leu Ala Thr Leu Cys Val Tyr  
 35 40 45

Phe Leu Leu Asp Glu Gly Asn Ile Leu Thr Ala Thr Lys Val Phe Thr  
 50 55 60

Ser Met Ser Leu Phe Asn Ile Leu Arg Ile Pro Leu Phe Glu Leu Pro  
 65 70 75 80

Thr Val Ile Ser Ala Val Val Gln Thr Lys Ile Ser Leu Gly Arg Leu  
 85 90 95

Glu Asp Phe Leu Asn Thr Glu Glu Leu Leu Pro Gln Ser Ile Glu Thr  
 100 105 110

Asn Tyr Thr Gly Asp His Ala Ile Gly Phe Thr Asp Ala Ser Phe Ser  
 115 120 125

Trp Asp Lys Thr Gly Met Pro Val Leu Lys Glu Ala Leu Trp Leu Met  
 130 135 140

Xaa Leu Xaa Xaa Pro Gly Phe Xaa Ile Ala Phe Cys Lys Lys Thr Phe  
 145 150 155 160

Ser Leu Ala Pro Ser  
 165

<210> 1907  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 1907  
 Cys Tyr Arg Cys Ile Phe Ser Ile Val Ser Asn Arg Phe Ile Phe Ser  
 1 5 10 15

Asn Pro Trp Ile Ser Ser Cys Ile Phe Thr Ile Ser Lys Gln Ser Asp  
 20 25 30

Ser Ile Ala Lys Arg Gln Lys Cys Glu Phe Phe Phe Lys Leu Val Asn  
 35 40 45

Thr Cys  
 50

<210> 1908  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 1908  
 Met Ile Met Ser Ser Val Thr Leu Leu Trp Ser Ile Leu His Gln Ala  
 1 5 10 15

Asp Ser Ser Glu Lys Met Thr Ile Ala Ala Ser Ala Ser Leu Thr Thr  
 20 25 30

Ile Asn Leu Gly Ala Thr Lys Asn Leu Arg Gln Gln Ile Leu Glu Leu  
35 40 45

Leu Gly Pro Ile Ser Met Asn His Gly Val His Phe Met Ala Ala Ile  
50 55 60

Ala Phe Val Trp Asn Glu Arg Arg Gln Asn Lys Thr Thr Thr Arg Thr  
65 70 75 80

Lys Val Cys Ile

<210> 1909  
<211> 84  
<212> PRT  
<213> Homo sapiens

<400> 1909  
Met Ile Met Ser Ser Val Thr Leu Leu Trp Ser Ile Leu His Gln Ala  
1 5 10 15

Asp Ser Ser Glu Lys Met Thr Ile Ala Ala Ser Ala Ser Leu Thr Thr  
20 25 30

Ile Asn Leu Gly Ala Thr Lys Asn Leu Arg Gln Gln Ile Leu Glu Leu  
35 40 45

Leu Gly Pro Ile Ser Met Asn His Gly Val His Phe Met Ala Ala Ile  
50 55 60

Ala Phe Val Trp Asn Glu Arg Arg Gln Asn Lys Thr Thr Thr Arg Thr  
65 70 75 80

Lys Val Cys Ile

<210> 1910  
<211> 275  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (153)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1910  
Met Trp Ser Tyr His Leu Ile Gly Leu Ile Trp Thr Ser Glu Phe Ile  
1 5 10 15

Leu Ala Cys Gln Gln Met Thr Ile Ala Gly Ala Val Val Thr Cys Tyr  
                   20                                  25                                  30  
 Phe Asn Arg Ser Lys Asn Asp Pro Pro Asp His Pro Ile Leu Ser Ser  
                   35                                  40                                  45  
 Leu Ser Ile Leu Phe Phe Tyr His Gln Gly Thr Ile Val Lys Gly Ser  
                   50                                  55                                  60  
 Phe Leu Ile Ser Val Val Xaa Ile Pro Arg Ile Ile Val Met Tyr Met  
                   65                                  70                                  75                                  80  
 Gln Asn Ala Leu Lys Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu  
                                   85                                  90                                  95  
 Phe Arg Cys Cys Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu  
                                   100                                  105                                  110  
 His Leu Asn Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp  
                                   115                                  120                                  125  
 Phe Cys Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser  
                                   130                                  135                                  140  
 Ser His Phe Thr Ser Ile Asn Cys Xaa Gly Asp Phe Ile Ile Phe Leu  
                                   145                                  150                                  155                                  160  
 Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met Ala  
                                   165                                  170                                  175  
 Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu Leu Leu  
                                   180                                  185                                  190  
 Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu Ser Val Phe  
                                   195                                  200                                  205  
 Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala Val Asp Leu Glu  
                                   210                                  215                                  220  
 Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe Met Asp Gln Glu Phe  
                                   225                                  230                                  235                                  240  
 Leu Ser Phe Val Lys Arg Ser Asn Lys Leu Asn Asn Ala Arg Ala Gln  
                                   245                                  250                                  255  
 Gln Asp Lys His Ser Leu Arg Asn Glu Glu Gly Thr Glu Leu Gln Ala  
                                   260                                  265                                  270  
 Ile Val Arg  
                   275

<210> 1911

<211> 275

<212> PRT

<213> Homo sapiens

<400> 1911

Met Trp Ser Tyr His Leu Ile Gly Leu Ile Trp Thr Ser Glu Phe Ile

1	5	10	15
Leu Ala Cys Gln Gln Met Thr Ile Ala Gly Ala Val Val Thr Cys Tyr	20	25	30
Phe Asn Arg Ser Lys Asn Asp Pro Pro Asp His Pro Ile Leu Ser Ser	35	40	45
Leu Ser Ile Leu Phe Phe Tyr His Gln Gly Thr Ile Val Lys Gly Ser	50	55	60
Phe Leu Ile Ser Val Val Arg Ile Pro Arg Ile Ile Val Met Tyr Met	65	70	75
Gln Asn Ala Leu Lys Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu	85	90	95
Phe Arg Cys Cys Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu	100	105	110
His Leu Asn Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp	115	120	125
Phe Cys Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser	130	135	140
Ser His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu	145	150	155
Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met Ala	165	170	175
Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu Leu Leu	180	185	190
Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu Ser Val Phe	195	200	205
Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala Val Asp Leu Glu	210	215	220
Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe Met Asp Gln Glu Phe	225	230	235
Leu Ser Phe Val Lys Arg Ser Asn Lys Leu Asn Asn Ala Arg Ala Gln	245	250	255
Gln Asp Lys His Ser Leu Arg Asn Glu Glu Gly Thr Glu Leu Gln Ala	260	265	270
Ile Val Arg	275		

<210> 1912  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens





<212> PRT  
 <213> Homo sapiens

<400> 1914

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Met Ala Cys Ile Leu Lys Arg Lys Ser Val Ile Ala Val Ser Phe Ile
 1           5           10           15

Ala Ala Phe Leu Phe Leu Leu Val Val Arg Leu Val Asn Glu Val Asn
      20           25           30

Phe Pro Leu Leu Leu Asn Cys Phe Gly Gln Pro Gly Thr Lys Trp Ile
      35           40           45

Pro Phe Ser Tyr Thr Tyr Arg Arg Pro Leu Arg Thr His Tyr Gly Tyr
      50           55           60

Ile Asn Val Lys Thr Gln Glu Pro Leu Gln Leu Asp Cys Asp Leu Cys
      65           70           75           80

Ala Ile Val Ser Asn Ser Gly Gln Met Val Gly Gln Lys Val Gly Asn
      85           90           95

Glu Ile Asp Arg Ser Ser Cys Ile Trp Arg Met Asn Asn Ala Pro Thr
      100          105          110

Lys Gly Tyr Glu Glu Asp Val Gly Arg Met Thr Met Ile Arg Val Val
      115          120          125

Ser His Thr Ser Val Pro Leu Leu Leu Lys Asn Pro Asp Tyr Phe Phe
      130          135          140

Lys Glu Ala Asn Thr Thr Ile Tyr Val Ile Trp Gly Pro Phe Arg Asn
      145          150          155          160

Met Arg Lys Asp Gly Asn Gly Ile Val Tyr Asn Met Leu Lys Lys Thr
      165          170          175

Val Gly Ile Tyr Pro Asn Ala Gln Ile Tyr Val Thr Thr Glu Lys Arg
      180          185          190

Met Ser Tyr Cys Asp Gly Val Phe Lys Lys Glu Thr Gly Lys Asp Arg
      195          200          205

Val Gln Ser Gly Ser Tyr Leu Ser Thr Gly Trp Phe Thr Phe Ile Leu
      210          215          220

Ala Met Asp Ala Cys Tyr Gly Ile His Val Tyr Gly Met Ile Asn Asp
      225          230          235          240

Thr Tyr Cys Lys Thr Glu Gly Tyr Arg Lys Val Pro Tyr His Tyr Tyr
      245          250          255

Glu Gln Gly Arg Asp Glu Cys Asp Glu Tyr Phe Leu His Glu His Ala
      260          265          270

Pro Tyr Gly Gly His Arg Phe Ile Thr Glu Lys Lys Val Phe Ala Lys
      275          280          285

Trp Ala Lys Lys His Arg Ile Ile Phe Thr His Pro Asn Trp Thr Leu
      290          295          300
  
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<220>  
 <221> SITE  
 <222> (298)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (300)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (301)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1917  
 Met Asp Arg Leu Lys Ser His Leu Thr Val Cys Phe Leu Pro Ser Val  
 1 5 10 15  
 Pro Phe Leu Ile Leu Val Ser Thr Leu Ala Thr Ala Lys Ser Val Thr  
 20 25 30  
 Asn Ser Thr Leu Asn Gly Thr Asn Val Val Leu Gly Ser Val Pro Val  
 35 40 45  
 Ile Ile Ala Arg Thr Asp His Ile Ile Val Lys Glu Gly Asn Ser Ala  
 50 55 60  
 Leu Ile Asn Cys Ser Val Tyr Gly Ile Pro Asp Pro Gln Phe Lys Trp  
 65 70 75 80  
 Tyr Asn Ser Ile Gly Lys Leu Leu Lys Glu Glu Glu Asp Glu Lys Glu  
 85 90 95  
 Arg Gly Gly Gly Lys Trp Gln Met His Asp Ser Gly Leu Leu Asn Ile  
 100 105 110  
 Thr Lys Val Ser Phe Ser Asp Arg Gly Lys Tyr Thr Cys Val Ala Ser  
 115 120 125  
 Asn Ile Tyr Gly Thr Val Asn Asn Thr Val Thr Leu Arg Val Ile Phe  
 130 135 140  
 Thr Ser Gly Asp Met Gly Val Tyr Tyr Met Val Val Cys Leu Val Ala  
 145 150 155 160  
 Phe Thr Ile Val Met Val Leu Asn Ile Thr Arg Leu Cys Met Met Ser  
 165 170 175  
 Ser His Leu Lys Lys Thr Glu Lys Ala Ile Asn Glu Phe Phe Arg Thr  
 180 185 190  
 Glu Gly Ala Glu Lys Leu Gln Lys Ala Phe Glu Ile Ala Lys Arg Ile  
 195 200 205  
 Pro Ile Ile Thr Ser Ala Lys Thr Leu Glu Leu Ala Lys Val Thr Gln  
 210 215 220  
 Phe Lys Thr Met Glu Phe Ala Arg Tyr Ile Glu Glu Leu Ala Arg Ser  
 225 230 235 240

Val Pro Leu Pro Pro Leu Ile Met Xaa Cys Arg Thr Ile Met Glu Glu  
245 250 255

Xaa Met Glu Val Val Gly Leu Glu Glu Gln Gly Gln Asn Phe Val Arg  
260 265 270

His Thr Pro Glu Gly Gln Glu Ala Ala Asp Arg Asp Glu Val Tyr Thr  
275 280 285

Ile Pro Asn Ser Leu Lys Arg Ser Asp Xaa Pro Xaa Xaa Val Leu Gly  
290 295 300

Arg Leu Ile Ala Ala Arg Ala Thr Ser Ala Asn Cys His Gln Gly Val  
305 310 315 320

Ser Ser Pro Ala Val Gln Lys Arg Ala Cys Arg  
325 330

<210> 1918  
<211> 77  
<212> PRT  
<213> Homo sapiens

<400> 1918  
Val Gly Ser Leu Leu Gly Ser Ser Leu Val Ala Leu Leu Ser Leu Pro  
1 5 10 15

Gly Gly Trp Leu His Cys Pro Lys Asp Phe Gly Asn Ile Asn Asn Cys  
20 25 30

Arg Met Asp Leu Tyr Phe Phe Leu Leu Ala Gly Ile Gln Ala Val Thr  
35 40 45

Ala Leu Leu Phe Val Trp Ile Ala Gly Arg Tyr Glu Arg Ala Ser Gln  
50 55 60

Gly Pro Ala Ser His Ser Arg Phe Ser Arg Asp Arg Gly  
65 70 75

<210> 1919  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 1919  
Met Gln Gly Ala Ile Met Gly Ile Phe Phe Cys Leu Ser Gly Val Gly  
1 5 10 15

Ser Leu Leu Gly Ser Ser Leu Val Ala Leu Leu Ser Leu Pro Gly Gly  
20 25 30

Trp Leu His Cys Pro Lys Asp Phe Gly Asn Ile Asn Asn Cys Arg Met  
35 40 45

Asp Leu Tyr Phe Phe Leu Leu Ala Gly Ile Gln Ala Val Thr Ala Leu  
1241

09833245-044201



Leu Pro Ser Ser Phe His Gln Val Leu Gly Ser Ser  
 100 105

<210> 1922  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 1922  
 Met Ser Leu Thr Pro Pro Thr Pro Val Leu Phe Leu Phe Leu Ser Leu  
 1 5 10 15  
 Leu Trp Ala Arg Phe Phe Leu Ser Arg Leu Lys Cys Pro Gly Gly Cys  
 20 25 30  
 Leu Cys Trp Pro Leu Leu Leu Ser Arg Gly Ser Ser Ala Ala Pro Trp  
 35 40 45  
 Ala Ser Val Pro Met Asp Gly Ala Ala His Ala Ala Ile Ser Ala Pro  
 50 55 60  
 Gly Leu Ser Val Gln Leu Leu Pro Arg Gln Leu Ala Ser Pro Ser Ala  
 65 70 75 80  
 Asn Thr Glu Leu Arg Val Leu Leu Leu Pro Ala Arg Val Arg His Tyr  
 85 90 95  
 Leu Pro Ser Ser Phe His Gln Val Leu Gly Ser Ser  
 100 105

<210> 1923  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1923  
 Ser Phe Leu Phe Phe Phe Phe Phe Phe Glu Thr Gly Phe Arg Ser  
 1 5 10 15  
 Val Phe Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Xaa Leu Pro Pro  
 20 25 30  
 Arg Phe Lys Lys Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr  
 35 40 45  
 Arg His Ala Leu Pro His Pro Val Thr Phe Phe Cys Val Phe Leu Val  
 50 55 60  
 Glu Met Ala Phe Ala Met Leu Ala Met Ala Gly Leu Lys Leu Leu Ala  
 65 70 75 80





50 55 60  
 Arg Ala His Thr Cys Thr Ser Pro Thr Arg Pro Leu Leu Ser Tyr Gln  
 65 70 75 80  
 Ser Val Pro Ala Ala Ser Met Ile Cys Pro Pro Cys Glu Ile Pro His  
 85 90 95  
 Gly Glu Gly Ser Phe Glu Val Ala Gly Arg Ser Thr Glu Met Xaa His  
 100 105 110  
 Leu Pro Val Glu Ile Pro Arg Leu Pro Gly Gln Cys Gln Gln Ser Gln  
 115 120 125  
 Lys Thr His Pro Leu Ala Trp Ser  
 130 135

<210> 1926  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1926  
 Met Tyr Gln Pro His Thr Gln Ser Trp Phe Pro Trp Cys Leu Ile Leu  
 1 5 10 15  
 Ser Ser Ser Gln Ala Gly Thr Arg Gly Leu Ser Trp His Leu Ala Asn  
 20 25 30  
 Ala Pro Val Lys Pro Gly Met Gly Leu Ala Phe Ala Leu Ile Arg Leu  
 35 40 45  
 Asp Ser Leu Leu Thr Cys Tyr Leu Pro Cys Leu His Val Arg Leu Val  
 50 55 60  
 Arg Ala His Thr Cys Thr Ser Pro Thr Arg Pro Leu Leu Ser Tyr Gln  
 65 70 75 80  
 Ser Val Pro Ala Ala Ser Met Ile Cys Pro Pro Cys Glu Ile Pro His  
 85 90 95  
 Gly Glu Gly Ser Phe Glu Val Ala Gly Arg Ser Thr Glu Met Ser His  
 100 105 110  
 Leu Pro Val Glu Ile Pro Arg Leu Pro Gly Gln Cys Gln Gln Ser Gln  
 115 120 125  
 Lys Thr His Pro Leu Ala Trp Ser  
 130 135

<210> 1927  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 1927

Met Leu Leu Gly Gly Arg Leu Leu Thr Gly Leu Ala Cys Gly Val Ala  
 1 5 10 15  
 Ser Leu Val Ala Pro Val Ser Val Pro Ser Leu Glu Cys Pro Val Ser  
 20 25 30  
 Arg Pro Glu Thr Glu Gly Glu Trp Asp Lys Pro Leu Pro Arg Pro Gly  
 35 40 45  
 Gly Ala Ala Pro Pro Gly Gly Thr Phe Trp Val Pro Gly Leu Lys Ser  
 50 55 60  
 Leu Arg Tyr Leu Ala Val Pro Pro Val Asp Pro Gly Lys Asp Pro Thr  
 65 70 75 80  
 Val Leu Ser Ile Leu His  
 85

<210> 1928  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1928  
 Met Leu Leu Leu Leu His Ile His Val Phe Gly His Ser Val Pro Ala  
 1 5 10 15  
 Ala Trp Ser Ala Ser Cys Val Gln Ile Leu Pro Val Leu Leu Arg Ile  
 20 25 30  
 Arg Ser Gln Ile Leu Ile His Thr Ile Leu Phe Ala Ala Tyr Thr Leu  
 35 40 45  
 Ala Phe Leu Asn Phe Phe Leu Ser Pro Asn Tyr Ala Val Phe Cys Leu  
 50 55 60  
 Ala Ile Val Leu Leu His Thr Ser Ser Phe Gly Leu Glu Tyr Pro Ser  
 65 70 75 80  
 Leu Cys Leu Phe Phe Leu Lys Glu Thr Gly Ser Gln Cys Gly Leu Val  
 85 90 95  
 Ser Asn Ser

<210> 1929  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1929  
 Met Leu Leu Leu Leu His Ile His Val Phe Gly His Ser Val Pro Ala  
 1 5 10 15  
 Ala Trp Ser Ala Ser Cys Val Gln Ile Leu Pro Val Leu Leu Arg Ile  
 20 25 30





Ile	Trp	Lys	Pro	Trp	Arg	Gln	Gln	Cys	Thr	Arg	Gly	Leu	Arg	Gly	Lys	
65					70					75					80	
His	Ala	Ala	Phe	Phe	Ala	Asp	Ala	Glu	Gly	Tyr	Phe	Ala	Ala	Cys	Thr	
			85						90					95		
Thr	Asp	Thr	Thr	Met	Asn	Ser	Ser	Leu	Ser	Glu	Pro	Leu	Tyr	Val	Pro	
			100					105					110			
Val	Lys	Phe	His	Asp	Leu	Pro	Ser	Glu	Lys	Pro	Glu	Xaa	Thr	Asn	Ile	
		115					120					125				
Asp	Thr	Glu	Lys	Thr	Pro	Lys	Lys	Ser	Arg	Val	Arg	Phe	Ser	Asn	Ile	
		130				135					140					
Met	Glu	Ile	Arg	Gln	Leu	Pro	Ser	Ser	His	Ala	Leu	Glu	Ala	Lys	Leu	
145					150					155					160	
Ser	Arg	Met	Ser	Tyr	Pro	Val	Lys	Glu	Gln	Glu	Ser	Ile	Leu	Lys	Thr	
				165					170					175		
Val	Gly	Lys	Leu	Thr	Ala	Thr	Gln	Val	Ala	Lys	Ile	Ser	Phe	Phe	Phe	
			180					185					190			
Cys	Phe	Val	Trp	Phe	Leu	Ala	Asn	Leu	Ser	Tyr	Gln	Glu	Ala	Leu	Ser	
		195					200					205				
Asp	Thr	Gln	Val	Ala	Ile	Val	Asn	Ile	Leu	Ser	Ser	Thr	Ser	Gly	Leu	
		210					215					220				
Phe	Thr	Leu	Ile	Leu	Ala	Ala	Val	Phe	Pro	Ser	Asn	Ser	Gly	Asp	Arg	
225					230					235					240	
Phe	Thr	Leu	Ser	Lys	Leu	Leu	Ala	Val	Ile	Leu	Ser	Ile	Gly	Gly	Val	
				245					250					255		
Val	Leu	Val	Asn	Leu	Ala	Gly	Ser	Glu	Lys	Pro	Ala	Gly	Arg	Asp	Thr	
			260					265					270			
Val	Gly	Ser	Ile	Trp	Ser	Leu	Ala	Gly	Ala	Met	Leu	Tyr	Ala	Val	Tyr	
		275					280					285				
Ile	Val	Met	Ile	Lys	Arg	Lys	Val	Asp	Arg	Glu	Asp	Lys	Leu	Asp	Ile	
		290				295					300					
Pro	Met	Phe	Phe	Gly	Phe	Val	Gly	Leu	Phe	Asn	Leu	Leu	Leu	Leu	Trp	
305					310					315					320	
Pro	Gly	Phe	Phe	Leu	Leu	His	Tyr	Thr	Gly	Phe	Glu	Asp	Phe	Glu	Phe	
				325					330					335		
Pro	Asn	Lys	Val	Val	Leu	Met	Cys	Ile	Ile	Ile	Asn	Gly	Leu	Ile	Gly	
			340					345					350			
Thr	Val	Leu	Ser	Glu	Phe	Leu	Trp	Leu	Trp	Gly	Cys	Phe	Leu	Thr	Ser	
		355					360					365				
Ser	Leu	Ile	Gly	Thr	Leu	Ala	Leu	Ser	Leu	Thr	Ile	Pro	Leu	Ser	Ile	
		370				375					380					



Ala Ser

<210> 1934

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (112)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1934

Met	Leu	Val	Ala	Trp	Cys	Leu	Ala	Pro	Gly	Asp	Leu	Leu	Leu	Leu	Val
1				5					10					15	

Ile	Ile	Thr	Leu	Pro	Arg	Lys	Glu	Val	Thr	Gly	Ser	Met	Ser	Thr	Val
		20					25						30		

Cys	Gln	Cys	Glu	Ala	Gln	Pro	Ala	Met	Leu	Pro	Lys	Gly	His	Phe	Thr
	35					40						45			

His	His	Ser	Pro	Lys	Ala	Ala	Arg	Lys	Ala	Gln	Glu	Gly	Thr	Arg	Lys
	50					55					60				

Ala	Arg	Trp	Val	Ala	Leu	Glu	Asp	Ser	Ala	Pro	Phe	His	Pro	Ser	Pro
65					70					75					80

Gly	Trp	Gly	Leu	Ile	Leu	Gln	Leu	His	Pro	Gln	Pro	Met	Asn	Xaa	Ser
			85						90						95

Gln	Ser	Ala	Trp	Lys	His	Cys	Cys	Trp	Lys	Asn	Cys	Glu	Glu	Pro	Xaa
		100						105					110		

Glu	Gly	Lys	Lys
		115	

<210> 1935

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1935

Lys	Thr	Pro	His	Ser	Trp	Val	Ile	His	Ala	Gly	Glu	Ala	Ser	Cys	His
1				5					10					15	







<400> 1939

Met Asn His Arg Ala Trp Pro Phe Leu Pro Phe Phe Phe Phe Leu  
1 5 10 15

Arg Arg Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Val  
20 25 30

Ser Ala His Cys Gly Leu Arg Leu Pro Gly Ser Arg His Ser Pro Ala  
35 40 45

Ser Ala Ser Arg Val Ala Gly Thr Ala Gly Ala Arg Tyr His Ala Arg  
50 55 60

Leu Val Phe Phe Val Phe Leu Val Glu Thr Gly Phe His Arg Val Gly  
65 70 75 80

Gln Asp Gly Leu Asp Leu Leu Thr Ser  
85

<210> 1940

<211> 223

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (208)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (218)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (221)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1940

Met Leu His Val Thr Arg Gly Val Trp Gly Ser Arg Val Arg Val Trp  
1 5 10 15

Pro Leu Leu Pro Ala Leu Leu Gly Pro Pro Arg Ala Leu Ser Ser Leu  
20 25 30

Ala Ala Lys Met Gly Glu Tyr Arg Lys Met Trp Asn Pro Arg Glu Pro  
35 40 45

Arg Asp Trp Ala Gln Gln Tyr Arg Glu Arg Phe Ile Pro Phe Ser Lys  
50 55 60

Glu Gln Leu Leu Arg Leu Leu Ile Gln Ala Leu Tyr Asp Pro Ile Asn

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65		70		75		80
Pro Asp Arg Glu Thr Leu Asp Gln Pro Ser Leu Thr Asp Pro Gln Arg						
	85			90		95
Leu Ser Asn Glu Gln Glu Val Leu Arg Ala Leu Glu Pro Leu Leu Ala						
	100		105		110	
Gln Ala Asn Phe Ser Pro Leu Ser Glu Asp Thr Leu Ala Tyr Ala Leu						
	115		120		125	
Val Val His His Pro Gln Asp Glu Val Gln Val Thr Val Asn Leu Asp						
	130		135		140	
Gln Tyr Val Tyr Ile His Phe Trp Ala Leu Gly Gln Pro Ser Xaa Ala						
	145		150		155	160
Asp Ala Pro Glu Val Gln Arg Gly Leu Gln Ala Cys Leu Leu Ser Pro						
	165		170		175	
Lys Leu Pro Leu Arg Glu Arg Arg Tyr Phe Lys Arg Val Val Leu Ala						
	180		185		190	
Ser Pro Asp Gln Asn Gly Asp Thr Trp Asp Leu Lys Lys Phe Ser Xaa						
	195		200		205	
Thr Pro Pro Leu Gly Lys Ala Trp Glu Xaa Leu Leu Xaa Gly Thr						
	210		215		220	

<210> 1941

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1941

Ser	Pro	Lys	Xaa	Pro	Pro	Ala	Glu	Arg	Arg	Tyr	Phe	Lys	Arg	Val	Val
1				5					10					15	



115	120	125
Val Val His His Pro Gln Asp Glu Val Gln Val Thr Val Asn Leu Asp		
130	135	140
Gln Tyr Val Tyr Ile His Phe Trp Ala Leu Gly Gln Arg Val Gly Gln		
145	150	155
Met Pro Leu Lys Ser Ser Val Gly Ser Arg Arg Val Phe Phe Thr Lys		
	165	170
Leu Pro Pro Ala Glu Arg Arg Tyr Phe Lys Arg Val Val Leu Ala Ala		
	180	185
Arg Thr Lys Arg Gly His Leu Val Leu Lys Ser Phe Lys Asp Thr Pro		
	195	200
Leu Glu Gly Leu Glu Gln Leu Leu Pro Glu Leu Lys Val Arg Thr Pro		
	210	220
Thr Leu Gln Arg Ala Leu Leu Asn Leu Met Leu Val Val Ser Gly Val		
	225	230
Ala Ile Phe Val Asn Val Gly Met Val Val Leu Thr Asp Leu Lys Val		
	245	250
Ala Thr Ser Leu Leu Leu Leu Leu Phe Ala Ile Phe Met Gly Leu Arg		
	260	265
Ala Ser Lys Cys Arg Ala Ala Leu Asn Ser Cys Thr Gly Cys Ser Pro		
	275	280
Ser Lys Asp Ser Trp Pro Arg Gly Gln Val Glu Ala Asp Thr Gln Leu		
	290	300
Val Leu Arg Leu Pro Lys Cys Val Ser Cys Leu Glu Ala Glu Ser Ala		
	305	310
Gln Arg Gly Ala Ala Phe Tyr		
	325	

<210> 1943  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 1943  
 Met Lys Asp Leu Trp Phe Leu Leu Leu Val Val Ala Ala Pro Thr Trp  
 1 5 10 15  
 Val Leu Ser Gln Val Arg Leu Gln Glu Ser Gly Pro Gly Leu Val Ser  
 20 25 30  
 Pro Ser Gln Thr Leu Ser Leu Thr Cys Ser Val Ser Gly Ile Asn Ile  
 35 40 45  
 Gly Gly Gly Lys Tyr Tyr Trp Ala Trp Val Arg Gln Arg Pro Gly Glu  
 50 55 60









Ala Lys Val Cys Val Gln Tyr Met Lys Asp Thr Asn Met Leu Phe Leu  
35 40 45

Gly Gly Leu Ile Val Ala Val Ala Val Glu Arg Trp Asn Leu His Lys  
50 55 60

Arg Ile Ala Leu Arg Thr Leu Leu Trp Val Gly Ala Lys Pro Ala Arg  
65 70 75 80

Leu Met Leu Gly Phe Met Gly Val Thr Ala Leu Leu Ser Met Trp Ile  
85 90 95

Ser Asn Thr Ala Thr Thr Ala Met Met Val Pro Ile Val Glu Ala Ile  
100 105 110

Leu Gln Gln Met Glu Ala Thr Ser Ala Ala Thr Glu Ala Gly Leu Glu  
115 120 125

Leu Val Asp Lys Gly Lys Ala Lys Glu Leu Pro Gly Ser Gln Val Ile  
130 135 140

Phe Glu Gly Pro Thr Leu Gly Gln Gln Glu Asp Gln Glu Arg Lys Arg  
145 150 155 160

Leu Cys Lys Ala Met Thr Leu Cys Ile Cys Tyr Ala Ala Ser Ile Gly  
165 170 175

Gly Thr Ala Thr Leu Thr Gly Thr Gly Pro Asn Val Val Leu Leu Gly  
180 185 190

Xaa Met Asn Glu Leu Phe Pro Asp Ser Lys Asp Leu Val Asn Phe Ala  
195 200 205

Ser Trp Phe Ala Phe Ala Phe Pro Asn Met Leu Val Met Leu Leu Phe  
210 215 220

Ala Trp Leu Trp Leu Gln Phe Val Tyr Met Arg Phe Lys Tyr Val Ser  
225 230 235 240

Asp Ala Thr Val Ala Ile Phe Val Ala Thr Leu Leu Phe Ile Val Pro  
245 250 255

Ser Gln Lys Pro Lys Phe Asn Phe Arg Ser Gln Thr Glu Glu Glu Arg  
260 265 270

Lys Thr Pro Phe Tyr Pro Pro Pro Leu Leu Asp Trp Lys Val Thr Gln  
275 280 285

Glu Lys Val Pro Trp Gly Ile Val Leu Leu Leu Gly Gly Gly Phe Ala  
290 295 300

Leu Ala Lys Gly Ser Glu Ala Ser Gly Leu Ser Val Trp Met Gly Lys  
305 310 315 320

Gln Met Glu Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr Leu Ile  
325 330 335

Leu Ser Leu Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn Val Ala  
340 345 350

Thr Thr Thr Leu Xaa Leu Pro Ile Phe Ala Ser Met Val Lys Thr Gly  
 355 360 365

Val Ile Met Asn Ile Ile Gly Val Phe Cys Val Phe Leu Ala Val Asn  
 370 375 380

Thr Trp Gly Arg Ala Ile Phe Asp Leu Asp His Phe Pro Asp Trp Ala  
 385 390 395 400

Asn Val Thr His Ile Glu Thr  
 405

<210> 1948  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<400> 1948  
 Met Ala Ser Ala Leu Ser Tyr Val Ser Lys Phe Lys Ser Phe Val Ile  
 1 5 10 15

Leu Phe Val Thr Pro Leu Leu Leu Leu Pro Leu Val Ile Leu Met Pro  
 20 25 30

Ala Lys Val Cys Val Gln Tyr Met Lys Asp Thr Asn Met Leu Phe Leu  
 35 40 45

Gly Gly Leu Ile Val Ala Val Ala Val Glu Arg Trp Asn Leu His Lys  
 50 55 60

Arg Ile Ala Leu Arg Thr Leu Leu Trp Val Gly Ala Lys Pro Ala Arg  
 65 70 75 80

Leu Met Leu Gly Phe Met Gly Val Thr Ala Leu Leu Ser Met Trp Ile  
 85 90 95

Ser Asn Thr Ala Thr Thr Ala Met Met Val Pro Ile Val Glu Ala Ile  
 100 105 110

Leu Gln Gln Met Glu Ala Thr Ser Ala Ala Thr Glu Ala Gly Leu Glu  
 115 120 125

Leu Val Asp Lys Gly Lys Ala Lys Glu Leu Pro Gly Ser Gln Val Ile  
 130 135 140

Phe Glu Gly Pro Thr Leu Gly Gln Gln Glu Asp Gln Glu Arg Lys Arg  
 145 150 155 160

Leu Cys

<210> 1949  
 <211> 377  
 <212> PRT  
 <213> Homo sapiens



Gly Lys Gln Met Glu Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr  
 290 295 300

Leu Ile Leu Ser Leu Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn  
 305 310 315 320

Val Ala Thr Thr Thr Leu Xaa Leu Pro Ile Phe Ala Ser Met Val Lys  
 325 330 335

Thr Gly Val Ile Met Asn Ile Ile Gly Val Phe Cys Val Phe Leu Ala  
 340 345 350

Val Asn Thr Trp Gly Arg Ala Ile Phe Asp Leu Asp His Phe Pro Asp  
 355 360 365

Trp Ala Asn Val Thr His Ile Glu Thr  
 370 375

<210> 1950  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (63)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (103)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1950  
 Met Ser Leu Leu Leu Leu Ser Val Leu Met Ser Pro Gly Ala Arg  
 1 5 10 15

Pro Ser Asp Pro Val Glu Val Ile Ala Ser Gly Pro Thr Val Ala Ser  
 20 25 30

Ser His Asn Val Gln Asp Cys Leu His Ile Leu Asn Arg Tyr Gly Leu  
 35 40 45

Arg Ala Ala Leu Pro Arg Ser Val Lys Thr Val Leu Ser Arg Xaa Asp  
 50 55 60

Ser Asp Pro His Gly Pro His Thr Cys Xaa His Val Leu Asn Val Ile  
 65 70 75 80

Ile Gly Ser Asn Val Leu Ala Leu Ala Glu Ala Gln Arg Gln Ala Glu  
 85 90 95

Ala Leu Gly Tyr Lys Leu Xaa Cys



Thr Arg Leu Thr Pro Ser Met Ala Gly Ala Ser Val Glu Glu Asp Ala  
130 135 140

Gln Leu His Glu Leu Ala Ala Glu Leu Gln Ile Pro Asp Leu Gln Leu  
145 150 155 160

Glu Glu Ala Leu Glu Thr Met Ala Trp Gly Arg Gly Pro Val Cys Leu  
165 170 175

Leu Ala Gly Gly Glu Pro Thr Val Gln Leu Gln Gly Ser Gly Arg Gly  
180 185 190

Gly Arg Asn Gln Glu Leu Ala Leu Arg Val Gly Ala Glu Leu Arg Arg  
195 200 205

Trp Pro Leu Gly Pro Ile Asp Val Leu Phe Leu Ser Gly Gly Thr Asp  
210 215 220

Gly Gln Asp Gly Pro Thr Glu Ala Ala Gly Ala Trp Val Thr Pro Glu  
225 230 235 240

Leu Ala Ser Gln Ala Ala Ala Glu Gly Leu Asp Ile Ala Thr Phe Leu  
245 250 255

Ala His Asn Asp Ser His Thr Phe Phe Cys Cys Leu Gln Gly Gly Ala  
260 265 270

His Leu Leu His Thr Gly Met Thr Gly Thr Asn Val Met Asp Thr His  
275 280 285

Leu Leu Phe Leu Arg Pro Arg  
290 295

<210> 1953

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1953

Met Trp Trp Ala Leu Cys Ser Met Leu Pro Leu Leu Gly Cys Ala Cys  
1 5 10 15

Ser Ser Gly Cys Trp Gly Ser Gly Pro Thr Pro Leu Leu Ala Glu Pro  
20 25 30

Thr Phe Leu Cys Val Ser Ser Arg Pro His Asn Pro Leu Ser Phe Leu  
35 40 45

Ser Val Leu Pro Cys Ser Arg Gly Pro Gly Pro Ser Gly Leu Gln Gly  
50 55 60

Asp Gly Ala Gly Leu Pro Ala His Leu Gly Pro Leu Ser Cys Ile Cys  
65 70 75 80

Leu Pro Ser Leu Leu Cys Asp Leu Gly Glu Arg Gln Cys Pro Leu Trp  
85 90 95

Ala Val Arg Ser Thr Gln Cys Leu Ile Ala Gly Lys Lys Val Leu Gln

100

105

110

Arg Leu Cys Pro  
115

&lt;210&gt; 1954

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1954

Met Trp Trp Ala Leu Cys Ser Met Leu Pro Leu Leu Gly Cys Ala Cys  
1 5 10 15

Ser Ser Gly Cys Trp Gly Ser Gly Pro Thr Pro Leu Leu Ala Glu Pro  
20 25 30

Thr Phe Leu Cys Val Ser Ser Arg Pro His Asn Pro Leu Ser Phe Leu  
35 40 45

Ser Val Leu Pro Cys Ser Arg Gly Pro Gly Pro Ser Gly Leu Gln Gly  
50 55 60

Asp Gly Ala Gly Leu Pro Ala His Leu Gly Pro Leu Ser Cys Ile Cys  
65 70 75 80

Leu Pro Ser Leu Leu Cys Asp Leu Gly Glu Arg Gln Cys Pro Leu Trp  
85 90 95

Ala Val Arg Ser Thr Gln Cys Leu Ile Ala Gly Lys Lys Val Leu Gln  
100 105 110

Arg Leu Cys Pro  
115

&lt;210&gt; 1955

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1955

Met Trp Trp Ala Leu Cys Ser Met Leu Pro Leu Leu Gly Cys Ala Cys  
1 5 10 15

Ser Ser Gly Cys Trp Gly Ser Gly Pro Thr Pro Leu Leu Ala Glu Pro  
20 25 30

Thr Phe Leu Cys Val Ser Ser Arg Pro His Asn Pro Leu Ser Phe Leu  
35 40 45

Ser Val Leu Pro Cys Ser Arg Gly Pro Gly Pro Ser Gly Leu Gln Gly  
50 55 60

Asp Gly Ala Gly Leu Pro Ala His Leu Gly Pro Leu Ser Cys Ile Cys  
65 70 75 80

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1		5		10		15									
Cys	Met	Glu	Pro	Glu	Pro	Leu	Thr	Pro	His	Pro	Arg	His	Tyr	Leu	Gly
		20						25					30		
Asp	Ala	Gln	Asp	Lys	Cys	Ser	Asn	Asp	Cys	Met	His	Cys	Leu	Ser	Ile
		35					40					45			
Gly	Gln	His	Glu	Leu	Pro	Ser	Tyr	Ser	Cys	Gln	Pro	Gly	Arg	Lys	Arg
	50					55					60				
Leu	Leu	Pro	His	His	Ser	Gln	Pro	Ser	Phe	Pro	Leu	Ala	Ser	Thr	
65					70					75					

<210> 1962

<211> 305

<212> PRT

<213> Homo sapiens

<400> 1962

Met	Pro	Ala	Asn	Phe	Thr	Glu	Gly	Ser	Phe	Asp	Ser	Ser	Gly	Thr	Gly
1				5					10					15	
Gln	Thr	Leu	Asp	Ser	Ser	Pro	Val	Ala	Cys	Thr	Glu	Thr	Val	Thr	Phe
			20					25					30		
Thr	Glu	Val	Val	Glu	Gly	Lys	Glu	Trp	Gly	Ser	Phe	Tyr	Tyr	Ser	Phe
		35					40					45			
Lys	Thr	Glu	Gln	Leu	Ile	Thr	Leu	Trp	Val	Leu	Phe	Val	Phe	Thr	Ile
	50					55					60				
Val	Gly	Asn	Ser	Val	Val	Leu	Phe	Ser	Thr	Trp	Arg	Arg	Lys	Lys	Lys
65					70					75					80
Ser	Arg	Met	Thr	Phe	Phe	Val	Thr	Gln	Leu	Ala	Ile	Thr	Glu	Lys	Gln
				85				90						95	
Ala	Arg	Val	Leu	Ile	Val	Ile	Ala	Trp	Ser	Leu	Ser	Phe	Leu	Phe	Ser
			100					105					110		
Ile	Pro	Thr	Leu	Ile	Ile	Phe	Gly	Lys	Arg	Thr	Leu	Ser	Asn	Gly	Glu
		115					120					125			
Val	Gln	Cys	Trp	Ala	Leu	Trp	Pro	Asp	Asp	Ser	Tyr	Trp	Thr	Pro	Tyr
	130					135					140				
Met	Thr	Ile	Val	Ala	Phe	Leu	Val	Tyr	Phe	Ile	Pro	Leu	Thr	Ile	Ile
145					150					155					160
Ser	Ile	Met	Tyr	Gly	Ile	Val	Ile	Arg	Thr	Ile	Trp	Ile	Lys	Ser	Lys
				165					170					175	
Thr	Tyr	Glu	Thr	Val	Ile	Ser	Asn	Cys	Ser	Asp	Gly	Lys	Leu	Cys	Ser
			180					185					190		
Ser	Tyr	Asn	Arg	Gly	Leu	Ile	Ser	Lys	Ala	Lys	Ile	Lys	Ala	Ile	Lys
		195					200					205			

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Tyr Ser Ile Ile Ile Ile Leu Ala Phe Ile Cys Cys Trp Ser Pro Tyr  
 210 215 220  
 Phe Leu Phe Asp Ile Leu Asp Asn Phe Asn Leu Leu Pro Asp Thr Gln  
 225 230 235 240  
 Glu Arg Phe Tyr Ala Ser Val Ile Ile Gln Asn Leu Pro Ala Leu Asn  
 245 250 255  
 Ser Ala Ile Asn Pro Leu Ile Tyr Cys Val Phe Ser Ser Ser Ile Ser  
 260 265 270  
 Phe Pro Cys Arg Glu Gln Arg Ser Gln Asp Ser Arg Met Thr Phe Arg  
 275 280 285  
 Glu Arg Thr Glu Arg His Glu Met Gln Ile Leu Ser Lys Pro Glu Phe  
 290 295 300  
 Ile  
 305

<210> 1963  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 1963  
 Met Ser Met Ala Met Gly Ser Ser Thr Leu Leu Leu Gly Trp Gly Pro  
 1 5 10 15  
 Gly Pro Gly Trp Asp Cys Gly Val Met Arg Val Val Leu Cys Trp Leu  
 20 25 30  
 Pro Gly Gly Asn Cys Gln Gly Glu Ser Ser Thr  
 35 40

<210> 1964  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (104)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1964  
 Met Pro Thr Thr Leu Pro Ser Asp Leu Met Leu Leu Trp Leu Gly Leu  
 1 5 10 15  
 Pro Ser Leu Pro Ser Pro Val Glu Glu Glu Gly Arg Leu Val Lys Gly  
 20 25 30  
 Leu Arg Leu Thr Leu Ala Ala Pro Ala Ser Glu Val Leu Pro Asp Trp  
 35 40 45









20

25

30

Arg Leu Phe Pro Glu Thr Ala Pro Gly Ala Pro Gly Ser Ile Pro Ala  
35 40 45

Pro Pro Ala Pro Gly Asp Glu Ala Ala Gly Ser Arg Val Glu Arg Leu  
50 55 60

Gly Gln Ala Phe Arg Arg Arg Val Arg Leu Leu Arg Glu Leu Ser Arg  
65 70 75 80

Ala Pro Gly Ala Cys Leu Pro Gly Gly  
85

<210> 1971

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1971

Met His Val Lys Trp Xaa Leu Ile Met Phe Leu Ile Cys Ile Ser Leu  
1 5 10 15

Glu Ser Asn Val Asn Gly Tyr Leu Phe Met Cys Leu Leu Phe Gly Tyr  
20 25 30

Leu Leu Trp Arg Asn Val Tyr Pro Asn Leu Leu Pro Ile Leu Asn Phe  
35 40 45

Asn Ser Cys Leu Leu Asp Leu Glu Leu Gln Glu Xaa Phe Val Tyr Ser  
50 55 60

Lys Tyr Gln Thr Phe Asn Lys Tyr Met Ile Cys Lys Cys Phe Phe Ser  
65 70 75 80

His Ala Val Cys Tyr Ser Phe Thr Phe Leu Ile Val Phe Phe Glu Ala  
85 90 95

Gln Thr Phe

<210> 1972

<211> 99

<212> PRT

<213> Homo sapiens



<400> 1972

Met His Val Lys Trp Tyr Leu Ile Met Phe Leu Ile Cys Ile Ser Leu  
1 5 10 15

Glu Ser Asn Val Asn Gly Tyr Leu Phe Met Cys Leu Leu Phe Gly Tyr  
20 25 30

Leu Leu Trp Arg Asn Val Tyr Pro Asn Leu Leu Pro Ile Leu Asn Phe  
35 40 45

Asn Ser Cys Leu Leu Asp Leu Glu Leu Gln Glu Phe Phe Val Tyr Ser  
50 55 60

Lys Tyr Gln Thr Phe Asn Lys Tyr Met Ile Cys Lys Cys Phe Phe Ser  
65 70 75 80

His Ala Val Cys Tyr Ser Phe Thr Phe Leu Ile Val Phe Phe Glu Ala  
85 90 95

Gln Thr Phe

<210> 1973

<211> 153

<212> PRT

<213> Homo sapiens

<400> 1973

Met His Thr His Thr Leu Ser Leu Val Ser Leu Ser Leu Ser His Ser  
1 5 10 15

Phe Leu Leu Ser Ser Gln Val Thr Cys Thr Leu Gly Phe Leu Val Glu  
20 25 30

Ala His Leu Pro Pro Leu Arg Gly Val Pro Asp Cys Ile His His Asn  
35 40 45

Pro Lys Thr Arg Val Gly Gly Asn Trp Arg Glu Gln Asn Thr Asp Leu  
50 55 60

Ile Leu Val Ser Leu Leu Glu Thr Ser Ser Pro Lys Ala Arg Ser Leu  
65 70 75 80

Lys Thr Asn Leu Leu Lys Thr Cys Leu Leu Lys Val Asn Asp Leu Met  
85 90 95

Thr Asn Leu Pro Lys Ala Gln Phe Leu Phe Trp Cys Val Tyr Ile His  
100 105 110

Leu Gly Val Leu Phe Phe Phe Val Met Leu Trp Ile Phe Gln Gly Phe  
115 120 125

Ile Ser Ile His Pro Arg Val Leu Leu Ser Tyr Tyr Gln Gln His Lys  
130 135 140

Phe Ile Lys Phe Ala Ala Leu Cys Lys  
145 150

<210> 1974  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 1974

Met	His	Thr	His	Thr	Leu	Ser	Leu	Val	Ser	Leu	Ser	Leu	Ser	His	Ser
1				5					10					15	
Phe	Leu	Leu	Ser	Ser	Gln	Val	Thr	Cys	Thr	Leu	Gly	Phe	Leu	Val	Glu
			20					25					30		
Ala	His	Leu	Pro	Pro	Leu	Arg	Gly	Val	Pro	Asp	Cys	Ile	His	His	Asn
		35					40					45			
Pro	Lys	Thr	Arg	Val	Gly	Gly	Asn	Trp	Arg	Glu	Gln	Asn	Thr	Asp	Leu
	50					55					60				
Ile	Leu	Val	Ser	Leu	Leu	Glu	Thr	Ser	Ser	Pro	Lys	Ala	Arg	Ser	Leu
	65				70					75					80
Lys	Thr	Asn	Leu	Leu	Lys	Thr	Cys	Leu	Leu	Lys	Val	Asn	Asp	Leu	Met
				85					90					95	
Thr	Asn	Leu	Pro	Lys	Ala	Gln	Phe	Leu	Phe	Trp	Cys	Val	Tyr	Ile	His
			100					105					110		
Leu	Gly	Val	Leu	Phe	Phe	Phe	Val	Met	Leu	Trp	Ile	Phe	Gln	Gly	Phe
		115					120					125			
Ile	Ser	Ile	His	Pro	Arg	Val	Leu	Leu	Ser	Tyr	Tyr	Gln	Gln	His	Lys
		130				135					140				
Phe	Ile	Lys	Phe	Ala	Ala	Leu	Cys	Lys							
		145			150										

<210> 1975  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids.

<220>  
 <221> SITE  
 <222> (123)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (127)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 1975  
 Met Gln Ala Gly Lys Gly Leu Ala Gln Val Trp Gly Val Ala Thr Phe  
   1                  5                  10                  15  
 Val Gln Leu Cys Ala His Thr Val Phe Leu Ser Met Tyr Leu Cys Met  
                   20                  25                  30  
 His Ile Cys Phe Ala Ala Ile Ser Ser Lys Val Arg Val Arg Val Asn  
           35                  40                  45  
 Ala Pro Phe Cys Val Ser Val Pro Leu Lys Val His Ala Pro Leu Ser  
           50                  55                  60  
 Leu Gly Ile Lys Val Gly Leu Gln Gly Gln Lys His Gly Arg Ala Thr  
   65                  70                  75                  80  
 Gly Glu Ala Gly Met Pro Gln Gly Glu Met Leu Gly Lys Gln Glu Pro  
                   85                  90                  95  
 Gln Thr Xaa Ser Ser Pro Lys Pro Thr Xaa Arg Arg Glu Val Ser Arg  
           100                  105                  110  
 Asn Glu Leu Asn Pro Val Ile Pro Xaa Ala Xaa Asn Pro Phe Xaa Lys  
           115                  120                  125  
  
 Lys

<210> 1976  
 <211> 467  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (151)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (160)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1976  
 Leu Gly Pro Ala Gly Leu Arg Arg Arg Thr Lys Arg Arg Lys Arg Gly  
   1                  5                  10                  15  
 Asp Asn Ser Thr Asp Thr Thr Gln Gly Asp Pro Leu Ser Ile His His



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340	345	350
Ser Met Ile Pro Ser Ala Ala Thr Leu Ile Ile Val Val Cys Val Gly		
355	360	365
Phe Leu Val Leu Met Val Val Leu Gly Leu Val Arg Ile His Ser Leu		
370	375	380
His Arg Arg Val Ser Gly Ala Gly Gly Pro Pro Gly Ala Ser Ser Asp		
385	390	395
Pro Lys Asp Pro Asp Leu Phe Trp Asp Asp Ser Ala Leu Thr Ile Ile		
405	410	415
Val Asn Pro Met Glu Ser Tyr Gln Asn Arg Gln Ser Cys Val Thr Gly		
420	425	430
Ala Val Gly Gly Gln Gln Glu Asp Glu Asp Ser Ser Asp Ser Glu Val		
435	440	445
Ala Asp Ser Pro Ser Ser Asp Glu Arg Arg Ile Ile Glu Thr Pro Pro		
450	455	460
His Arg Tyr		
465		
<210> 1977		
<211> 231		
<212> PRT		
<213> Homo sapiens		
<220>		
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<222> (92)		
<223> Xaa equals any of the naturally occurring L-amino acids		
<220>		
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<222> (113)		
<223> Xaa equals any of the naturally occurring L-amino acids		
<220>		
<221> SITE		
<222> (116)		
<223> Xaa equals any of the naturally occurring L-amino acids		
<400> 1977		
Met Gln Ala Gly Lys Gly Leu Ala Gln Val Trp Gly Val Ala Thr Phe		
1	5	10
Val Gln Leu Cys Ala His Thr Val Phe Leu Ser Met Tyr Leu Cys Met		
20	25	30
His Ile Cys Phe Ala Ala Ile Ser Ser Lys Val Arg Val Arg Val Asn		
35	40	45
Ala Pro Phe Cys Val Ser Val Pro Leu Lys Val His Ala Pro Leu Ser		
50	55	60

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Leu Gly Ile Lys Val Gly Leu Gln Gly Gln Lys His Gly Arg Ala Thr  
65 70 75 80

Gly Glu Ala Gly Met Pro Gln Gly Glu Met Leu Xaa Lys Gln Glu Pro  
85 90 95

Gln Thr Ser Ser Ser Pro Lys Pro Thr Arg Arg Arg Glu Val Ser Arg  
100 105 110

Xaa Glu Leu Xaa Pro Val Ile Pro Ser Ala Ala Thr Leu Ile Ile Val  
115 120 125

Val Cys Val Gly Phe Leu Val Leu Met Val Val Leu Gly Leu Val Arg  
130 135 140

Ile His Ser Leu His Arg Arg Val Ser Gly Ala Gly Gly Pro Pro Gly  
145 150 155 160

Ala Ser Ser Asp Pro Lys Asp Pro Asp Leu Phe Trp Asp Asp Ser Ala  
165 170 175

Leu Thr Ile Ile Val Asn Pro Met Glu Ser Tyr Gln Asn Arg Gln Ser  
180 185 190

Cys Val Thr Gly Ala Val Gly Gly Gln Gln Glu Asp Glu Asp Ser Ser  
195 200 205

Asp Ser Glu Val Ala Asp Ser Pro Ser Ser Asp Glu Arg Arg Ile Ile  
210 215 220

Glu Thr Pro Pro His Arg Tyr  
225 230

<210> 1978  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 1978  
Pro Phe Thr Phe Gln His Asp Cys Glu Ala Ser Pro Ala Thr Trp Asn  
1 5 10 15

Tyr Leu Arg Arg Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile  
20 25 30

Ile Leu Phe Gly Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg  
35 40 45

Gly Leu Met Gln Tyr Val Ala Gly Leu Leu Phe Leu Met Gly Gly Thr  
50 55 60

Phe Cys Ile Ile Ser Leu Cys Thr Cys Val Ala Gly Ile Asn Phe Glu  
65 70 75 80

Leu Ser Arg Tyr Pro Arg Tyr Leu Tyr Gly Leu Pro Asp Asp Ile Ser  
85 90 95



Arg Gly Leu Met Gln Tyr Val Ala Gly Leu Leu Phe Leu Met Gly Gly  
 50 55 60  
 Thr Phe Cys Ile Ile Ser Leu Cys Thr Cys Val Ala Gly Ile Asn Phe  
 65 70 75 80  
 Glu Leu Ser Arg Tyr Pro Arg Tyr Leu Tyr Gly Leu Pro Asp Asp Ile  
 85 90 95  
 Ser His Gly Tyr Gly Trp Ser Met Phe Cys Ala Trp Gly Gly Leu Gly  
 100 105 110  
 Leu Thr Leu Ile Ser Gly Phe Phe Cys Thr Leu Ala Pro Ser Val Gln  
 115 120 125  
 Pro Val Pro Arg Thr Asn Tyr Pro Lys Ser Arg Pro Glu Asn Gly Thr  
 130 135 140  
 Val Cys  
 145

<210> 1981  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (40)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1981  
 Met Cys Ser Met Phe Cys Glu Arg Leu Leu Leu Cys His Cys Gln  
 1 5 10 15  
 Leu Ser Ile Ala Val Phe Met Tyr Trp Val His Val Thr His Leu Ser  
 20 25 30  
 Ser Val Arg Arg Ile Asn Tyr Xaa Phe Leu Ile Tyr Lys Lys Gly Met  
 35 40 45  
 Gln Leu Pro Ser Trp Tyr Pro Ser Ser Cys Pro Ala Ser Arg Lys Asn  
 50 55 60  
 Gln Val Thr Gly Met Asn Gly Arg Val Val Asn Val Glu Asp Phe Ile  
 65 70 75 80  
 Glu Gln Trp Lys Trp Leu Ser Val Gly Trp Gly Ala Arg Lys Gly Leu  
 85 90 95  
 Glu Trp Glu Asp Asp Leu Tyr Leu Glu Phe Gly His Pro  
 100 105

<210> 1982  
 <211> 109



<212> PRT  
<213> Homo sapiens

<400> 1982

Met Cys Ser Met Phe Cys Glu Arg Leu Leu Leu Cys His Cys Gln  
1 5 10 15  
Leu Ser Ile Ala Val Phe Met Tyr Trp Val His Val Thr His Leu Ser  
20 25 30  
Ser Val Arg Arg Ile Asn Tyr Val Phe Leu Ile Tyr Lys Lys Gly Met  
35 40 45  
Gln Leu Pro Ser Trp Tyr Pro Ser Ser Cys Pro Ala Ser Arg Lys Asn  
50 55 60  
Gln Val Thr Gly Met Asn Gly Arg Val Val Asn Val Glu Asp Phe Ile  
65 70 75 80  
Glu Gln Trp Lys Trp Leu Ser Val Gly Trp Gly Ala Arg Lys Gly Leu  
85 90 95  
Glu Trp Glu Asp Asp Leu Tyr Leu Glu Phe Gly His Pro  
100 105

<210> 1983

<211> 109

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1983

Met Cys Ser Met Phe Cys Glu Arg Leu Leu Leu Leu Cys His Cys Gln  
1 5 10 15  
Leu Ser Ile Ala Val Phe Met Tyr Trp Val His Val Thr His Leu Ser  
20 25 30  
Ser Val Arg Arg Ile Asn Tyr Xaa Phe Leu Ile Tyr Lys Lys Gly Met  
35 40 45  
Gln Leu Pro Ser Trp Tyr Pro Ser Ser Cys Pro Ala Ser Arg Lys Asn  
50 55 60  
Gln Val Thr Gly Met Asn Gly Arg Val Val Asn Val Glu Asp Phe Ile  
65 70 75 80  
Glu Gln Trp Lys Trp Leu Ser Val Gly Trp Gly Ala Arg Lys Gly Leu  
85 90 95  
Glu Trp Glu Asp Asp Leu Tyr Leu Glu Phe Gly His Pro  
100 105

<210> 1984  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (99)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1984  
 Gly Ala Cys Arg Gly Ser Ser Glu Pro Gly Ala Thr Pro Arg Pro Asp  
     1                    5                    10                    15  
 Gly Glu Pro Arg Pro Leu Pro Gly Leu His Cys Ala Xaa Gly Met Pro  
                     20                    25                    30  
 Thr Pro Leu Pro Xaa Ser Pro Leu Gly Leu Arg Ser Leu Arg Arg Val  
                     35                    40                    45  
 Gly Trp Pro Val Arg Lys Gly Arg Val Gly Arg Ala Trp Gly Trp Ala  
                     50                    55                    60  
 Gly Leu Cys Glu Glu Leu Gln Pro Gln Ala Pro Pro Cys His Glu Ser  
     65                    70                    75                    80  
 Lys Arg Gly Arg Gly Ala Val Ala His Asp Cys Asn Pro Ser Thr Leu  
                     85                    90                    95  
 Gly Gly Xaa Ser Gly Gln Ile Thr Arg Ser Gly Val  
                     100                    105

<210> 1985  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1985  
 Met Lys Lys Phe Ser Tyr Ala Phe Leu Tyr Phe Pro Ser Leu Asn Phe  
     1                    5                    10                    15  
 Thr Val Ser Thr Trp Leu Cys Thr Ala Leu Phe Leu Leu His Ser His

30

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Val Tyr Thr Arg Thr Gly Ser Gly Ala Val Arg Phe Cys Asp Arg Cys  
 115 120 125

His Leu Ile Lys Pro Asp Arg Cys His His Cys Ser Val Cys Ala Met  
 130 135 140

Cys Val Leu Lys Met Asp His His Cys Pro Trp Val Asn Asn Cys Ile  
 145 150 155 160

Gly Phe Ser Asn Tyr Lys Phe Phe Leu Gln Phe Leu Ala Tyr Ser Xaa  
 165 170 175

Leu Tyr Cys Leu Xaa Ile Ala Thr Thr Val Phe Ser Tyr Phe Ile Lys  
 180 185 190

Tyr Trp Xaa Gly Glu Leu Pro Xaa Val Ala  
 195 200

<210> 1989  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1989  
 Lys Pro Asn Gly Lys Asn Ile Ser Phe His Ser Ser Tyr Gln Val Lys  
 1 5 10 15

Gly Asn Ser Glu Asn Phe Leu Arg Val Phe Asn Ser Pro Thr Lys Ile  
 20 25 30

Ile Asn His Ile Tyr Arg Ala Phe Leu Val Leu Lys Gly Ile Lys Leu  
 35 40 45

His Leu Leu Leu Val Cys Val Cys Ile Cys Glu His Val Gln His Ile  
 50 55 60

Tyr Thr Lys Phe Cys Tyr Ser Val Lys Ile Arg Ala Lys Asn Leu Lys  
 65 70 75 80

Pro Leu Phe Asn Tyr Ala Phe Pro Leu Asn Ser Asn Leu Asn Ile Cys  
 85 90 95

<210> 1990  
 <211> 331  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (176)  
 <223> Xaa equals any of the naturally occurring L-amino acids.

Figure 1 consists of 11 subplots arranged in a grid, showing the effect of the 1997-1998 El Niño on the 1998-1999 season. The subplots are labeled (a) through (k). Each subplot shows the number of cases (Y-axis) and the number of deaths (Z-axis) over time (X-axis). The 1997-1998 season shows a significant increase in cases and deaths compared to the 1998-1999 season. The 1996-1997 season shows a significant increase in cases and deaths compared to the 1997-1998 season. The 1995-1996 season shows a significant increase in cases and deaths compared to the 1996-1997 season. The 1994-1995 season shows a significant increase in cases and deaths compared to the 1995-1996 season. The 1993-1994 season shows a significant increase in cases and deaths compared to the 1994-1995 season.

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Figure 1 is a schematic representation of the experimental design. It shows a sequence of events: Pretest, Training, and Transfer. Each phase includes a Pretest and a Posttest measurement. The Training phase is divided into Training and Posttest sub-phases. The Transfer phase is divided into Transfer and Posttest sub-phases. The Control group receives no training. The Training group is divided into Training and Posttest sub-phases. The Transfer group is divided into Transfer and Posttest sub-phases. The Control group is divided into Pretest and Posttest sub-phases. The diagram shows the flow of participants through these phases and the timing of measurements.

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<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 1991
Met Trp Gly Leu Leu Leu Ala Leu Ala Ala Phe Ala Pro Ala Val Gly
  1             5             10             15
```

Pro Ala Leu Gly Ala Pro Arg Asn Ser Val Leu Gly Leu Ala Gln Pro  
20 25 30

Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His Ser Ser Pro  
35 40 45

Ala Gln Pro Pro Ala Glu Thr Ala Asn Gly Thr Ser Glu Gln His Val  
50 55 60

Arg Ile Arg Val Ile Lys Lys Lys Lys Val Ile Met Lys Lys Arg Lys  
65 70 75 80

Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu  
85 90 95

Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu  
100 105 110

Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
115 120 125

Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
130 135 140

Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
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Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
115 120 125  
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
130 135 140  
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
145 150 155 160  
Gly Ala Trp Cys Ala Glu Glu Gln Xaa Ala Asp Pro Trp Phe Gln Val  
165 170 175  
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Xaa Ile Thr Gln Gly Arg  
180 185 190  
Asn Xaa Val Trp Arg  
195

<210> 1993  
<211> 197  
<212> PRT  
<213> Homo sapiens

<400> 1993  
Met Trp Gly Leu Leu Leu Ala Leu Ala Ala Phe Ala Pro Ala Val Gly  
1 5 10 15  
Pro Ala Leu Gly Ala Pro Arg Asn Ser Val Leu Gly Leu Ala Gln Pro  
20 25 30  
Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His Ser Ser Pro  
35 40 45  
Ala Gln Pro Pro Ala Glu Thr Ala Asn Gly Thr Ser Glu Gln His Val  
50 55 60  
Arg Ile Arg Val Ile Lys Lys Lys Lys Val Ile Met Lys Lys Arg Lys  
65 70 75 80  
Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu  
85 90 95  
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu  
100 105 110  
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
115 120 125  
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
130 135 140  
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
145 150 155 160  
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val  
165 170 175

```
<210> 1994
<211> 241
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (230)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1994  
Met Ala Leu Arg Leu Leu Arg Arg Ala Ala Arg Gly Ala Ala Ala Ala  
1 5 10 15

Gly Tyr Ser Ser Ser Ser His His Lys Tyr Ile Pro Arg Arg Ala Val  
35 40 45

Leu Asn Val Asp Cys Ala Val Leu Asp Cys Glu Asp Gly Val Ala Ala  
65 70 75 80

Ile Asp Leu Gly Pro Thr Glu Lys Cys Val Arg Val Asn Ser Val Ser  
100 105 110

Ser Gly Leu Ala Glu Glu Asp Leu Glu Thr Leu Leu Gln Ser Arg Val  
115 120 125

Leu Pro Ser Ser Leu Met Leu Pro Lys Val Glu Ser Pro Glu Glu Ile  
130 135 140

Gln Trp Phe Ala Asp Lys Phe Ser Phe His Leu Lys Gly Arg Lys Leu  
145 150 155 160

Glu Gln Pro Met Asn Leu Ile Pro Phe Val Glu Thr Ala Met Gly Leu



Val Gly Leu Phe Leu Asp Ala Val Val Phe Gly Gly Glu Asp Phe Arg  
195 200 205

Ala Ser Ile Gly Ala Thr Ser Ser Lys Glu Thr Leu Asp Ile Leu Tyr  
210 215 220

Ala Arg Gln Lys Ile Val Val Ile Ala Lys Ala Phe Gly Leu Gln Ala  
225 230 235 240

Val Asp Leu Val Tyr Ile Asp Phe Arg Asp Gly Ala Gly Leu Leu Arg  
245 250 255

Gln Ser Arg Glu Gly Ala Ala Met Gly Phe Thr Gly Lys Gln Val Ile  
260 265 270

His Pro Asn Gln Ile Ala Val Val Gln Glu Gln Phe Ser Pro Ser Pro  
275 280 285

Glu Lys Ile Lys Trp Ala Glu Glu Leu Ile Ala Ala Phe Lys Glu His  
290 295 300

Gln Gln Leu Gly Lys Gly Ala Phe Thr Phe Gln Gly Ser Met Ile Asp  
305 310 315 320

Met Pro Leu Leu Lys Gln Ala Gln Asn Thr Val Thr Leu Ala Thr Ser  
325 330 335

Ile Lys Glu Lys  
340

<210> 1996  
<211> 85  
<212> PRT  
<213> Homo sapiens

<400> 1996  
Met Ser Pro Pro Pro Pro Leu Leu Leu Leu Leu Leu Ser Leu Ala  
1 5 10 15

Leu Leu Gly Ala Arg Ala Arg Ala Glu Pro Ala Gly Ser Ala Val Pro  
20 25 30

Ala Gln Ser Arg Pro Cys Val Asp Cys His Ala Phe Glu Phe Met Gln  
35 40 45

Arg Ala Leu Gln Asp Leu Arg Lys Thr Ala Cys Ser Leu Asp Ala Arg  
50 55 60

Thr Glu Thr Leu Leu Leu Gln Ala Glu Arg Arg Ala Leu Cys Ala Cys  
65 70 75 80

Trp Pro Ala Gly His  
85

<210> 1997

<211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1997

```

Met Ala Pro Pro Pro Ala Cys Arg Ser Pro Met Ser Pro Pro Pro
 1          5          10          15
Leu Leu Leu Leu Leu Leu Ser Leu Ala Leu Leu Gly Ala Arg Ala
      20          25          30
Arg Ala Glu Pro Ala Gly Ser Ala Val Pro Ala Gln Ser Arg Pro Cys
      35          40          45
Val Asp Cys His Ala Phe Glu Phe Met Gln Arg Ala Leu Gln Asp Leu
      50          55          60
Arg Lys Thr Ala Cys Ser Leu Asp Ala Arg Thr Glu Thr Leu Leu Leu
      65          70          75          80
Gln Ala Glu Arg Arg Ala Leu Cys Ala Cys Trp Pro Ala Gly His
      85          90          95

```

<210> 1998  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1998

```

Met Leu Cys Met Gln Thr Val Met Pro Gln His Thr Tyr Leu Gln His
 1          5          10          15
Leu Val Phe Gly Phe Cys Leu Leu Ile Leu Cys Ile Asn Leu Ser Val

```

	20		25		30										
Leu	Ala	His	Arg	Tyr	Thr	Leu	Cys	Tyr	Phe	Ser	Met	Thr	Gly	Glu	Tyr
	35						40						45		
Ser	Ile	Ile	Asn	Gly	Gln	Leu	Leu	Val	Tyr	Leu	Ser	Asn	Leu	Ser	Ala
	50						55				60				
Gln	Trp	Lys	Tyr	Arg	Tyr	Phe	Gln	Thr	Leu	Leu	Xaa	Leu	Xaa	Xaa	Xaa
	65						70				75				80
Gly Val Val Xaa															

<210> 1999  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1999
Met Leu Cys Met Gln Thr Val Met Pro Gln His Thr Tyr Leu Gln His
1 5 10 15
Leu Val Phe Gly Phe Cys Leu Leu Ile Leu Cys Ile Asn Leu Ser Val
20 25 30
Leu Ala His Arg Tyr Thr Leu Cys Tyr Phe Ser Met Thr Gly Glu Tyr
35 40 45
Ser Ile Ile Asn Gly Gln Leu Leu Val Tyr Leu Ser Asn Leu Ser Ala
50 55 60
Gln Trp Lys Tyr Arg Tyr Phe Gln Thr Leu Leu Val Leu Lys Lys Lys
65 70 75 80
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
85 90 95
Lys Lys Lys Lys Lys Lys Lys Lys
100 105

<210> 2000  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (76)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (106)  
 <223> Xaa equals any of the naturally occurring L-amino acids.

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<210> 2001
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
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<210> 2002
<211> 75
<212> PRT
<213> Homo sapiens
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1299

Variable	Control		Treatment	
	Mean	SD	Mean	SD
Age	3.5	0.5	3.5	0.5
Gender	Male	Female	Male	Female
Weight	10.0	1.0	10.0	1.0
Height	100.0	10.0	100.0	10.0
Temperature	37.0	0.2	37.0	0.2
Pulse	80.0	10.0	80.0	10.0
Respiration	20.0	2.0	20.0	2.0
Blood Pressure	100/60	10/5	100/60	10/5
Heart Rate	80.0	10.0	80.0	10.0
Respiratory Rate	20.0	2.0	20.0	2.0
Blood Oxygen Saturation	95.0	2.0	95.0	2.0
Glucose	100.0	10.0	100.0	10.0
Urea Nitrogen	10.0	2.0	10.0	2.0
Creatinine	1.0	0.2	1.0	0.2
Alkaline Phosphatase	100.0	20.0	100.0	20.0
Aspartate Aminotransferase	40.0	10.0	40.0	10.0
Alanine Aminotransferase	40.0	10.0	40.0	10.0
Lactate Dehydrogenase	100.0	20.0	100.0	20.0
Prothrombin Time	12.0	1.0	12.0	1.0
Partial Thromboplastin Time	30.0	2.0	30.0	2.0
Fibrinogen	4.0	0.5	4.0	0.5
D-Dimer	0.5	0.1	0.5	0.1
Procalcitonin	0.1	0.05	0.1	0.05
Interleukin-6	1.0	0.5	1.0	0.5
Tumor Necrosis Factor- $\alpha$	1.0	0.5	1.0	0.5
C-reactive Protein	1.0	0.5	1.0	0.5
Erythrocyte Sedimentation Rate	10.0	5.0	10.0	5.0
Hemoglobin	15.0	1.0	15.0	1.0
Hematocrit	45.0	3.0	45.0	3.0
White Blood Cell Count	10.0	2.0	10.0	2.0
Neutrophil Count	6.0	1.0	6.0	1.0
Lymphocyte Count	3.0	0.5	3.0	0.5
Monocyte Count	1.0	0.2	1.0	0.2
Eosinophil Count	0.5	0.1	0.5	0.1
Platelet Count	250.0	20.0	250.0	20.0
Prothrombin Time (INR)	1.2	0.1	1.2	0.1
Partial Thromboplastin Time (APTT)	30.0	2.0	30.0	2.0
Fibrinogen (D-Dimer)	4.0	0.5	4.0	0.5
D-Dimer (Fibrinogen)	0.5	0.1	0.5	0.1
Procalcitonin (Interleukin-6)	0.1	0.05	0.1	0.05
Interleukin-6 (Tumor Necrosis Factor- $\alpha$ )	1.0	0.5	1.0	0.5
Tumor Necrosis Factor- $\alpha$ (C-reactive Protein)	1.0	0.5	1.0	0.5
C-reactive Protein (Erythrocyte Sedimentation Rate)	1.0	0.5	1.0	0.5
Erythrocyte Sedimentation Rate (Hemoglobin)	10.0	5.0	10.0	5.0
Hemoglobin (Hematocrit)	15.0	1.0	15.0	1.0
Hematocrit (White Blood Cell Count)	45.0	3.0	45.0	3.0
White Blood Cell Count (Neutrophil Count)	10.0	2.0	10.0	2.0
Neutrophil Count (Lymphocyte Count)	6.0	1.0	6.0	1.0
Lymphocyte Count (Monocyte Count)	3.0	0.5	3.0	0.5
Monocyte Count (Eosinophil Count)	1.0	0.2	1.0	0.2
Eosinophil Count (Platelet Count)	0.5	0.1	0.5	0.1
Platelet Count (Prothrombin Time)	250.0	20.0	250.0	20.0
Prothrombin Time (Partial Thromboplastin Time)	12.0	1.0	12.0	1.0
Partial Thromboplastin Time (Fibrinogen)	30.0	2.0	30.0	2.0
Fibrinogen (D-Dimer)	4.0	0.5	4.0	0.5
D-Dimer (Procalcitonin)	0.5	0.1	0.5	0.1
Procalcitonin (Interleukin-6)	0.1	0.05	0.1	0.05
Interleukin-6 (Tumor Necrosis Factor- $\alpha$ )	1.0	0.5	1.0	0.5
Tumor Necrosis Factor- $\alpha$ (C-reactive Protein)	1.0	0.5	1.0	0.5
C-reactive Protein (Erythrocyte Sedimentation Rate)	1.0	0.5	1.0	0.5
Erythrocyte Sedimentation Rate (Hemoglobin)	10.0	5.0	10.0	5.0
Hemoglobin (Hematocrit)	15.0	1.0	15.0	1.0
Hematocrit (White Blood Cell Count)	45.0	3.0	45.0	3.0
White Blood Cell Count (Neutrophil Count)	10.0	2.0	10.0	2.0
Neutrophil Count (Lymphocyte Count)	6.0	1.0	6.0	1.0
Lymphocyte Count (Monocyte Count)	3.0	0.5	3.0	0.5
Monocyte Count (Eosinophil Count)	1.0	0.2	1.0	0.2
Eosinophil Count (Platelet Count)	0.5	0.1	0.5	0.1
Platelet Count (Prothrombin Time)	250.0	20.0	250.0	20.0
Prothrombin Time (Partial Thromboplastin Time)	12.0			

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<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<210> 2004  
<211> 147



<212> PRT  
<213> Homo sapiens

<400> 2004

Met Trp Leu Trp Val Trp Leu Ile His Thr Leu His Ser Gly Leu Gln  
1 5 10 15  
Lys Pro Arg Glu Arg Ser Leu Pro Glu Ala Thr Phe Gln Asn Leu Leu  
20 25 30  
His Pro Pro Thr Asp Leu Pro Ser Pro Cys Pro Leu Phe Glu Ser Arg  
35 40 45  
Cys Gln Val Leu Pro Ala Asp Thr Trp Leu Leu Glu Gly Arg Cys Ser  
50 55 60  
Phe His Leu Thr Met Gln Ala Cys Phe Ala Val Gly Arg Ala Val Leu  
65 70 75 80  
Ser Ser Ser Gln Leu His Thr Gly Ile Thr Trp Arg Val Gln Lys Leu  
85 90 95  
Pro Ala Ser Val Lys Glu His Gln Cys Ile Ser Thr Ala Asn Ile Pro  
100 105 110  
Asn Ala Arg Leu Asp Ser Leu Gln Leu Pro Gly Pro Pro Gly Phe Ser  
115 120 125  
Ser Phe Gln Glu Leu Ser Asp Pro Gly Ser Ser Leu Asn Val Gly Tyr  
130 135 140  
Lys Leu Thr  
145

<210> 2005

<211> 147

<212> PRT

<213> Homo sapiens

<400> 2005

Met Trp Leu Trp Val Trp Leu Ile His Thr Leu His Ser Gly Leu Gln  
1 5 10 15  
Lys Pro Arg Glu Arg Ser Leu Pro Glu Ala Thr Phe Gln Asn Leu Leu  
20 25 30  
His Pro Pro Thr Asp Leu Pro Ser Pro Cys Pro Leu Phe Glu Ser Arg  
35 40 45  
Cys Gln Val Leu Pro Ala Asp Thr Trp Leu Leu Glu Gly Arg Cys Ser  
50 55 60  
Phe His Leu Thr Met Gln Ala Cys Phe Ala Val Gly Arg Ala Val Leu  
65 70 75 80  
Ser Ser Ser Gln Leu His Thr Gly Ile Thr Trp Arg Val Gln Lys Leu  
85 90 95



<220>  
 <221> SITE  
 <222> (34)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2007

Lys	Gly	Thr	Pro	Ala	Gly	Thr	Gly	Pro	Glu	Phe	Pro	Gly	Arg	Pro	Thr
1				5					10					15	
Arg	Pro	Gly	Asp	Leu	Trp	Pro	Thr	Xaa	Xaa	Val	Cys	Val	Thr	Ser	Ser
			20					25					30		
Leu	Xaa	Cys	Thr	Leu	Glu	Asn	Gly	Val	Pro	Cys	Val	Ile	Gln	Glu	Ser
		35					40					45			
Ala	Pro	Val	His	Asn	Ser	Phe	Ile	Asp	Trp	Ser	Ala	Thr	Cys	Glu	Gly
		50				55					60				
Gln	Phe	Ser	Ser	Ala	Tyr	Cys	Pro	Leu	Glu	Leu	Asn	Asp	Tyr	Asn	Ala
65					70					75					80
Phe	Pro	Glu	Glu	Asn	Met	Asn	Tyr	Ala	Asn	Gly	Phe	Pro	Cys	Pro	Ala
				85					90					95	
Asp	Val	Gln	Thr	Asp	Phe	Ile	Asp	His	Asn	Ser	Gln	Ser	Thr	Trp	Asn
		100						105					110		
Thr	Pro	Pro	Asn	Met	Pro	Ala	Ala	Trp	Gly	His	Ala	Ser	Phe	Ile	Ser
		115					120					125			
Ser	Pro	Pro	Tyr	Leu	Thr	Ser	Thr	Arg	Ser	Leu	Ser	Pro	Met	Ser	Gly
		130				135					140				
Leu	Phe	Gly	Ser	Ile	Trp	Ala	Pro	Gln	Ser	Asp	Val	Tyr	Glu	Asn	Cys
145					150					155					160
Cys	Pro	Ile	Asn	Pro	Thr	Thr	Glu	His	Ser	Thr	His	Met	Glu	Asn	Gln
			165						170					175	
Ala	Val	Val	Cys	Lys	Glu	Tyr	Tyr	Pro	Gly	Phe	Asn	Pro	Phe	Arg	Ala
			180					185					190		
Tyr	Met	Asn	Leu	Asp	Ile	Trp	Thr	Thr	Thr	Ala	Asn	Arg	Asn	Ala	Asn
		195					200					205			
Phe	Pro	Leu	Ser	Arg	Asp	Ser	Ser	Tyr	Cys	Gly	Asn	Val			
		210				215					220				

<210> 2008  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 2008

Met	Ala	Gly	Leu	Arg	Arg	Pro	Gln	Pro	Gly	Cys	Tyr	Cys	Arg	Thr	Ala
1				5					10					15	









0033245 041204

1	5	10	15
Cys Gly Ala Trp	Ala Leu Arg Asp	Thr Pro Ile Pro Arg Trp	Lys Leu
20	25	30	
Ser Ser Ala Glu	Thr Tyr Ser Arg Met	Arg Leu Lys Leu Val	Pro Asn
35	40	45	
His His Phe Asp	Pro His Leu Glu Ala	Ser Ala Leu Arg Asp	Asn Leu
50	55	60	
Gly Glu Val Pro	Leu Thr Pro Thr Glu Glu	Ala Ser Leu Pro Leu Ala	
65	70	75	80
Val Thr Lys Glu	Ala Lys Val Ser Thr	Pro Pro Glu Leu Leu Gln	Glu
85	90	95	
Asp Gln Leu Gly	Glu Asp Glu Leu Ala	Glu Leu Glu Thr Pro	Met Glu
100	105	110	
Ala Ala Glu Leu	Asp Glu Gln Arg Glu	Lys Leu Val Leu Ser	Ala Glu
115	120	125	
Cys Gln Leu Val	Thr Val Val Ala Val	Val Pro Gly Leu Leu	Glu Val
130	135	140	
Thr Thr Gln Asn	Val Tyr Phe Tyr Asp	Gly Ser Thr Glu Arg	Val Glu
145	150	155	160
Thr Glu Glu Gly	Ile Gly Tyr Asp Phe	Arg Arg Pro Leu Ala	Gln Leu
165	170	175	
Arg Glu Val His	Leu Arg Arg Phe Asn	Leu Arg Arg Ser Ala	Leu Glu
180	185	190	
Leu Phe Phe Ile	Asp Gln Ala Asn Tyr	Phe Leu Asn Phe Pro	Cys Lys
195	200	205	
Val Gly Thr Thr	Pro Val Ser Ser Pro	Ser Gln Thr Pro Arg	Pro Gln
210	215	220	
Pro Gly Pro Ile	Pro Pro His Thr Gln	Val Arg Asn Gln Val	Tyr Ser
225	230	235	240
Trp Leu Leu Arg	Leu Arg Pro Pro Ser	Gln Gly Tyr Leu Ser	Ser Arg
245	250	255	
Ser Pro Gln Glu	Met Leu Arg Ala Ser	Gly Leu Thr Gln Lys	Trp Val
260	265	270	
Gln Arg Glu Ile	Ser Asn Phe Glu Tyr	Leu Met Gln Leu Asn	Thr Ile
275	280	285	
Ala Gly Arg Thr	Tyr Asn Asp Leu Ser	Gln Tyr Pro Val Phe	Pro Trp
290	295	300	
Val Leu Gln Asp	Tyr Val Ser Pro Thr	Leu Asp Leu Ser Asn	Pro Ala
305	310	315	320
Val Phe Arg Asp	Leu Ser Lys Pro Ile	Gly Val Val Asn Pro	Lys His



				325						330						335			
Ala	Gln	Leu	Val	Arg	Glu	Lys	Tyr	Glu	Ser	Phe	Glu	Asp	Pro	Ala	Gly				
			340					345					350						
Thr	Ile	Asp	Lys	Phe	His	Tyr	Gly	Thr	His	Tyr	Ser	Asn	Ala	Ala	Gly				
		355					360					365							
Val	Met	His	Tyr	Leu	Ile	Arg	Val	Glu	Pro	Phe	Thr	Ser	Leu	His	Val				
	370					375					380								
Gln	Leu	Gln	Ser	Gly	Arg	Phe	Asp	Cys	Ser	Asp	Arg	Gln	Phe	His	Ser				
385					390					395					400				
Val	Ala	Ala	Ala	Trp	Gln	Ala	Arg	Leu	Glu	Ser	Pro	Ala	Asp	Val	Lys				
				405					410					415					
Glu	Leu	Ile	Pro	Glu	Phe	Phe	Tyr	Phe	Pro	Asp	Phe	Leu	Glu	Asn	Gln				
			420					425					430						
Asn	Gly	Phe	Asp	Leu	Gly	Cys	Leu	Gln	Leu	Thr	Asn	Glu	Lys	Val	Gly				
	435						440					445							
Asp	Val	Val	Leu	Pro	Pro	Trp	Ala	Ser	Ser	Pro	Glu	Asp	Phe	Ile	Gln				
	450					455					460								
Gln	His	Arg	Gln	Ala	Leu	Glu	Ser	Glu	Tyr	Val	Ser	Ala	His	Leu	His				
465					470					475					480				
Glu	Trp	Ile	Asp	Leu	Ile	Phe	Gly	Tyr	Lys	Gln	Arg	Gly	Pro	Ala	Ala				
			485						490					495					
Glu	Glu	Ala	Leu	Asn	Val	Phe	Tyr	Tyr	Cys	Thr	Tyr	Glu	Gly	Ala	Val				
			500					505					510						
Asp	Leu	Asp	His	Val	Thr	Asp	Glu	Arg	Glu	Arg	Lys	Ala	Leu	Glu	Gly				
	515						520				525								
Ile	Ile	Ser	Asn	Phe	Gly	Gln	Thr	Pro	Cys	Gln	Leu	Leu	Lys	Glu	Pro				
	530					535					540								
His	Pro	Thr	Arg	Leu	Ser	Ala	Glu	Glu	Ala	Ala	His	Arg	Leu	Ala	Arg				
545					550				555						560				
Leu	Asp	Thr	Asn	Ser	Pro	Ser	Ile	Phe	Gln	His	Leu	Asp	Glu	Leu	Lys				
			565						570				575						
Ala	Phe	Phe	Ala	Glu	Val	Val	Ser	Asp	Gly	Val	Pro	Leu	Val	Leu	Ala				
			580					585					590						
Leu	Val	Pro	His	Arg	Gln	Pro	His	Ser	Phe	Ile	Thr	Gln	Gly	Ser	Pro				
		595					600					605							
Asp	Leu	Leu	Val	Thr	Val	Ser	Ala	Ser	Gly	Leu	Leu	Gly	Thr	His	Ser				
	610					61													

645	650	655
Trp Val Pro Gly Ser Gly Val Ser Gly Gln Ala Leu Ala Val Ala Pro		
660	665	670
Asp Gly Lys Leu Leu Phe Ser Gly Gly His Trp Asp Gly Ser Leu Arg		
675	680	685
Val Thr Ala Leu Pro Arg Gly Lys Leu Leu Ser Gln Leu Ser Cys His		
690	695	700
Leu Asp Val Val Thr Cys Leu Ala Leu Asp Thr Cys Gly Ile Tyr Leu		
705	710	715
Ile Ser Gly Ser Arg Asp Thr Thr Cys Met Val Trp Arg Leu Leu His		
725	730	735
Gln Gly Gly Leu Ser Val Gly Leu Ala Pro Lys Pro Val Gln Val Leu		
740	745	750
Tyr Gly His Gly Ala Ala Val Ser Cys Val Ala Ile Ser Thr Glu Leu		
755	760	765
Asp Met Ala Val Ser Gly Ser Glu Asp Gly Thr Val Ile Ile His Thr		
770	775	780
Val Arg Arg Gly Gln Phe Val Ala Ala Leu Arg Pro Leu Gly Ala Thr		
785	790	795
Phe Pro Gly Pro Ile Phe His Leu Ala Leu Gly Ser Glu Gly Gln Ile		
805	810	815
Val Val Gln Ser Ser Ala Trp Glu Arg Pro Gly Ala Gln Val Thr Tyr		
820	825	830
Ser Leu His Leu Tyr Ser Val Asn Gly Lys Leu Arg Ala Ser Leu Pro		
835	840	845
Leu Ala Glu Gln Pro Thr Ala Leu Thr Val Thr Glu Asp Phe Val Leu		
850	855	860
Leu Gly Thr Ala Gln Cys Ala Leu His Ile Leu Gln Leu Asn Thr Leu		
865	870	875
Leu Pro Ala Ala Pro Pro Leu Pro Met Lys Val Ala Ile Arg Ser Val		
885	890	895
Ala Val Thr Lys Glu Arg Ser His Val Leu Val Gly Leu Glu Asp Gly		
900	905	910
Lys Leu Ile Val Val Val Ala Gly Gln Pro Ser Glu Val Arg Ser Ser		
915	920	925
Gln Phe Ala Arg Lys Leu Trp Arg Ser Ser Arg Arg Ile Ser Gln Val		
930	935	940
Ser Ser Gly Glu Thr Glu Tyr Asn Pro Thr Glu Ala Arg		
945	950	955

<210> 2013  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 2013  
Met Trp Trp Glu Asp Leu Met Lys Gly Leu Phe Cys Leu Trp Pro Leu  
1 5 10 15  
Val Arg Ser Val Ser Ser Leu Met Thr Ser Ser Thr Ser Cys Pro Ser  
20 25 30  
Pro Pro Thr Leu Pro Pro Trp Arg Pro Cys Leu Pro Arg Leu Arg Met  
35 40 45  
Arg Val Leu Val Leu Leu Ile Trp Ser  
50 55

<210> 2014  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 2014  
Met Trp Trp Glu Asp Leu Met Lys Gly Leu Phe Cys Leu Trp Pro Leu  
1 5 10 15  
Val Arg Ser Val Ser Ser Leu Met Thr Ser Ser Thr Ser Cys Pro Ser  
20 25 30  
Pro Pro Thr Leu Pro Pro Trp Arg Pro Cys Leu Pro Arg Leu Arg Met  
35 40 45  
Arg Val Leu Val Leu Leu Ile Trp Ser  
50 55

<210> 2015  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 2015  
Met Asn Leu His Tyr Leu Leu Ala Val Ile Leu Ile Gly Ala Ala Gly  
1 5 10 15  
Val Phe Ala Phe Ile Asp Val Cys Leu Gln Arg Asn His Phe Arg Gly  
20 25 30  
Lys Lys Ala Lys Lys His Met Leu Val Pro Pro Pro Gly Lys Glu Lys  
35 40 45  
Gly Pro Gln Gln Gly Lys Gly Pro Glu Pro Ala Lys Pro Pro Glu Pro  
50 55 60  
Gly Lys Pro Pro Gly Pro Ala Lys Gly Lys Lys

<210> 2016  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<400> 2016  
 Met Arg Leu Ser Lys Ser Asn Gln Val Gln Leu Phe Leu Tyr Phe Leu  
 1 5 10 15  
 Leu Gln Trp Ser Leu Gly Ser Val Asn Ala Glu Thr Ser Leu Gln Ile  
 20 25 30  
 Leu Leu Ala Cys Ser Phe Thr Thr Asp Ser  
 35 40

<210> 2017  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 2017  
 Met Trp Ala Val Leu Arg Leu Ala Leu Arg Pro Cys Ala Arg Ala Ser  
 1 5 10 15  
 Pro Ala Gly Pro Arg Ala Tyr His Gly Asp Ser Val Ala Ser Leu Gly  
 20 25 30  
 Thr Gln Pro Asp Leu Gly Ser Ala Leu Tyr Gln Glu Asn Tyr Lys Gln  
 35 40 45  
 Met Lys Ala Leu Val Asn Gln Leu His Glu Arg Val Glu His Ile Lys  
 50 55 60  
 Leu Gly Gly Gly Glu Lys Ala Arg Ala Leu His Ile Ser Arg Gly Lys  
 65 70 75 80  
 Leu Leu Pro Arg Glu Arg Ile Asp Asn Leu Ile Asp Pro Gly Ser Pro  
 85 90 95  
 Phe Leu Glu Leu Ser Gln Phe Ala Gly Tyr Gln Leu Tyr Asp Asn Glu  
 100 105 110  
 Glu Val Pro Gly Gly Gly Ile Ile Thr Gly Ile Gly Arg Val Ser Gly  
 115 120 125  
 Val Glu Cys Met Ile Ile Ala Asn Asp Ala Thr Val Lys Gly Gly Ala  
 130 135 140  
 Tyr Tyr Pro Val Thr Val Lys Lys Gln Leu Arg Ala Gln Glu Ile Ala  
 145 150 155 160  
 Met Gln Thr Gly Ser Pro Ala Ser Thr  
 165

<210> 2018  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<400> 2018  
 Met Val Lys His Phe Thr Leu Trp Met Val Cys Leu Ser Leu Val Phe  
 1 5 10 15  
 Arg Lys Leu Leu Ser Leu Leu Pro Lys Lys Lys Glu Gly Gln Val Asn  
 20 25 30  
 Phe Phe Asn Gln Lys Lys Ile Thr His Phe Ile Lys Pro  
 35 40 45

<210> 2019  
 <211> 388  
 <212> PRT  
 <213> Homo sapiens

<400> 2019  
 Met Met Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser Leu Met Val Thr  
 1 5 10 15  
 Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys Val Cys Val Ile  
 20 25 30  
 Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr Ala Phe His Phe  
 35 40 45  
 Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala His Arg Ala Leu  
 50 55 60  
 Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly Pro Ala Leu Cys  
 65 70 75 80  
 Phe Ala Ala Ala Ile Phe Ser Leu Phe Phe Val Pro Leu Ser Tyr Leu  
 85 90 95  
 Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser Lys Val Thr Gly  
 100 105 110  
 Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro Ser Ala His Pro  
 115 120 125  
 Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu Ser Lys Glu Arg  
 130 135 140  
 Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val Ala Thr Leu Leu  
 145 150 155 160  
 Ile Leu Asp Ile Cys Glu Asp Asn Val Pro Asp Pro Lys Asp Val Lys  
 165 170 175  
 Glu Arg Phe Ser Gly Ser Leu Val Ala Ala Leu Ser Ala Thr Gly Pro  
 180 185 190













Ala Glu Ala Gln Ala Leu Ser Leu Glu Glu Val Ala Val Gln Gln Thr  
195 200 205

Gly Asp Asp Asp Glu Val Asp Asp Phe Glu Asp Phe Ile Phe Ser His  
210 215 220

Phe Phe Gly Asp Lys Ala Leu Lys Lys Arg Ser Gly Lys Lys Asp Lys  
225 230 235 240

His Ser Gln Ser Pro Arg Ala Ala Gly Pro Arg Glu Gly His Ser His  
245 250 255

Ser His His His His Arg Gly  
260

<210> 2023  
<211> 123  
<212> PRT  
<213> Homo sapiens

<400> 2023  
Met Leu Cys Leu Ser Ser Val Val Met Phe Leu Pro Gln Pro Gly Ala  
1 5 10 15

Ala Ser Asp Pro Leu Phe Ile Trp Glu Ala Ser Cys His Ser Leu Gly  
20 25 30

Gln Asn Trp Ala Gln Gly Lys Gly Leu Ser Pro Glu Asp Gly Leu Glu  
35 40 45

Gly Leu Gly His Thr Arg Ala Trp Thr Phe Gly Ala Gly Glu Pro Gly  
50 55 60

Leu Arg Leu Leu Asn Val Arg Gly Leu Leu Thr Arg Gly Pro Ser Arg  
65 70 75 80

Gly Ser Leu Cys Pro Leu Leu Trp Ser Asp Gln Ala Leu His Leu Ser  
85 90 95

Ala Gly Pro Leu Trp Gln Arg Ser Pro Val Leu Phe Leu Leu Phe Leu  
100 105 110

Phe Leu Thr Lys Ala Cys Ala Thr Ser Cys Pro  
115 120

<210> 2024  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 2024  
Met Asn Cys Val Glu Trp Trp Lys Ser Val Phe Leu Phe Val Val Leu  
1 5 10 15

Leu Phe Val Thr Ser Val Ser Cys Leu Gly Val Val Gly Val Ala Val

20 25 30

Glu Gly Ser Leu Gln Ser Cys Ser Phe Tyr Ser Leu Cys Asn Lys Arg  
35 40 45

Leu Glu His Val Lys Gly Ile Phe Lys  
50 55

<210> 2025  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 2025  
Met Asn Cys Val Glu Trp Trp Lys Ser Val Phe Leu Phe Val Val Leu  
1 5 10 15

Leu Phe Val Thr Ser Val Ser Cys Leu Gly Val Val Gly Val Ala Val  
20 25 30

Glu Gly Ser Leu Gln Ser Cys Ser Phe Tyr Ser Leu Cys Asn Lys Arg  
35 40 45

Leu Glu His Val Lys Gly Ile Phe Lys  
50 55

<210> 2026  
<211> 92  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (29)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2026  
Met Glu Ile Arg Thr Arg Val Val Trp Leu Cys Leu Cys Leu Cys Leu  
1 5 10 15

Cys Leu Cys Leu Cys Leu Ser Leu Phe Ser Leu Pro Xaa Ser Leu Ser  
20 25 30

Pro Leu Pro Ser Pro Leu Ser Leu Ser Val Ser Leu Ser Leu Ser Phe  
35 40 45

His Gly Leu Pro Leu Met Pro Ser Arg Ser Trp Thr Val Leu Leu Pro  
50 55 60

Ser Gln Leu Thr Ala Thr Ser Leu Pro Asp Ser Pro Ala Ser Ala Cys  
65 70 75 80

Arg Val Pro Ala Ile Ala Gly Ala Arg His His Ala  
85 90

<210> 2027  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 2027  
 Met Asn Arg Ser Thr Arg Ser Tyr Arg Cys Trp Ala Thr Trp Pro Arg  
 1 5 10 15  
 Leu Gly Trp Ala Leu Pro Cys Cys Met Asn Ser Leu Arg Lys Gly Arg  
 20 25 30  
 Lys Phe Ser Gln Ile Thr Thr Ser Leu Met Ala Ser Val Ser Ser Ala  
 35 40 45  
 Ser Met Val Ser Arg Arg Arg Arg Pro Leu Pro Lys His Pro Val Thr  
 50 55 60  
 Thr Thr Ser Thr Ala Thr Ala Leu Leu Gly Thr Ser Ser Thr Trp Ser  
 65 70 75 80  
 Lys Ser

<210> 2028  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 2028  
 Met Val Thr Ala Ser Leu Leu Leu Leu Pro Ala Val Met Ala Ile Val  
 1 5 10 15  
 Phe Pro Ile Thr Trp Ala Val Gln Ser Gln Ser Trp Ala Ala Glu Phe  
 20 25 30  
 Asn Gly Ala Cys Phe Gln Val Leu His Gly Lys Leu Tyr Ser  
 35 40 45

<210> 2029  
 <211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 2029  
 Met Ser Arg Gly Asp Asn Cys Thr Asp Leu Leu Ala Leu Gly Ile Pro  
 1 5 10 15  
 Ser Ile Thr Gln Ala Trp Gly Leu Trp Val Leu Leu Gly Ala Val Thr  
 20 25 30  
 Leu Leu Phe Leu Ile Ser Leu Ala Ala His Leu Ser Gln Trp Thr Arg  
 35 40 45  
 Gly Arg Ser Arg Ser His Pro Gly Gln Gly Arg Ser Gly Glu Ser Val

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50	55	60
Glu Glu Val Pro Leu Tyr Gly Asn Leu His Tyr Leu Gln Thr Gly Arg		
65	70	75 80
Leu Ser Gln Asp Pro Glu Pro Asp Gln Gln Asp Pro Thr Leu Gly Gly		
	85 90	95
Pro Ala Arg Ala Ala Glu Glu Val Met Cys Tyr Thr Ser Leu Gln Leu		
	100 105	110
Arg Pro Pro Gln Gly Arg Ile Pro Gly Pro Gly Thr Pro Val Lys Tyr		
	115 120	125
Ser Glu Val Val Leu Asp Ser Glu Pro Lys Ser Gln Ala Ser Gly Pro		
	130 135	140
Glu Pro Glu Leu Tyr Ala Ser Val Cys Ala Gln Thr Arg Arg Ala Arg		
145	150 155	160
Ala Ser Phe Pro Asp Gln Ala Tyr Ala Asn Ser Gln Pro Ala Ala Ser		
	165 170	175

<210> 2030

<211> 168

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2030

Met Pro Leu Leu Arg Gly Leu Leu Trp Leu Gln Val Leu Cys Ala Gly
1 5 10 15

Pro Leu His Thr Glu Ala Val Val Leu Leu Val Pro Ser Asp Asp Gly
20 25 30

Arg Ala Phe Leu Leu Arg Ser Arg Leu Leu His Pro Glu Ala His Val
35 40 45

Pro Pro Ala Ala Asp Arg Gly Ala Ser Leu Gln Cys Val Leu His Gln
50 55 60

Ala Ala Pro Lys Ser Arg Pro Arg Ser Pro Ala Ala Gly Ala Ala Leu
65 70 75 80

Leu His Xaa Pro Arg Arg Thr Gly Asp Glu Pro Cys Arg Glu Phe His
85 90 95

Gly Asn Gly Phe Pro Gly Pro Thr Gln Leu Thr Pro Gly Glu Cys Gly
100 105 110



<211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (39)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2032  
 Met Pro Leu Leu Arg Gly Leu Leu Trp Leu Gln Val Leu Cys Ala Gly  
   1                  5                  10                  15  
 Pro Leu His Thr Glu Ala Val Val Leu Leu Val Pro Ser Asp Asp Gly  
           20                  25                  30  
 Arg Ala Phe Leu Leu Arg Xaa Arg Leu Leu His Pro Glu Ala His Val  
       35                  40                  45  
 Pro Pro Ala Ala Asp Arg Gly Ala Ser Leu Gln Cys Val Leu His Gln  
       50                  55                  60  
 Ala Ala Pro Lys Ser Arg Pro Arg Ser Pro Ala Ala Gly Ala Ala Leu  
       65                  70                  75                  80  
 Leu His Arg Pro Arg Arg Thr Gly Asp Glu Pro Cys Arg Glu Phe His  
           85                  90                  95  
 Gly Asn Gly Phe Pro Gly Pro Thr Gln Leu Thr Pro Gly Glu Cys Gly  
           100                  105                  110  
 Leu Pro Ala Pro Ser Ser Leu Leu Gln His Ala Ser Ala Pro Val Arg  
       115                  120                  125  
 Thr Gly Ser Glu Gly Gln Val Val Gly Cys Pro Arg Ala Arg Gly Glu  
       130                  135                  140  
 Thr Gly Glu Gly Leu Ser Leu Ala Phe Leu Ser Ser Leu Met Phe Thr  
       145                  150                  155                  160  
 Ser Arg Asn Gly Leu Val Gly Cys  
           165

<210> 2033  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (39)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2033  
 Met Pro Leu Leu Arg Gly Leu Leu Trp Leu Gln Val Leu Cys Ala Gly  
   1                  5                  10                  15  
 Pro Leu His Thr Glu Ala Val Val Leu Leu Val Pro Ser Asp Asp Gly







Leu Leu Ser Ser Gly His Gly Glu Glu Gln Pro Pro Glu Thr Ala Ala  
 20 25 30  
 Gln Arg Cys Phe Cys Gln Val Ser Gly Tyr Leu Asp Asp Cys Thr Cys  
 35 40 45  
 Asp Val Glu Thr Ile Asp Arg Phe Asn Asn Tyr Arg Leu Phe Pro Arg  
 50 55 60  
 Leu Gln Lys Leu Leu Glu Ser Asp Tyr Phe Arg Tyr Tyr Lys Val Asn  
 65 70 75 80  
 Leu Lys Arg Pro Cys Pro Phe Trp Asn Asp Ile Ser Gln Cys Gly Arg  
 85 90 95  
 Arg Asp Cys Ala Val Lys Pro Cys Gln Ser Asp Glu Val Pro Asp Gly  
 100 105 110  
 Ile Lys Ser Ala Ser Tyr Lys Tyr Ser Glu Glu Ala Asn Asn Leu Ile  
 115 120 125  
 Glu Glu Cys Glu Gln Ala Glu Arg Leu Gly Ala Val Asp Glu Ser Leu  
 130 135 140  
 Ser Glu Glu Thr Gln Lys Ala Val Leu Gln Trp Thr Lys His Asp Asp  
 145 150 155 160  
 Ser Ser Asp Asn Phe Cys Glu Ala Asp Asp Ile Gln Ser Pro Glu Ala  
 165 170 175  
 Glu Tyr Val Asp Leu Leu Leu Asn Pro Glu Arg Tyr Thr Gly Tyr Lys  
 180 185 190  
 Gly Pro Asp Ala Trp Lys Ile Trp Asn Val Ile Tyr Glu Glu Asn Cys  
 195 200 205  
 Phe Lys Pro Gln Thr Ile Lys Arg Pro Leu Asn Pro Leu Ala Ser Gly  
 210 215 220  
 Gln Gly Thr Ser Glu Glu Asn Thr Phe Tyr Ser Trp Leu Glu Gly Leu  
 225 230 235 240  
 Cys Val Glu Lys Arg Ala Phe Tyr Arg Leu Ile Ser Gly Leu His Ala  
 245 250 255  
 Ser Ile Asn Val His Leu Ser Ala Arg Tyr Leu Leu Gln Glu Thr Trp  
 260 265 270  
 Leu Glu Lys Lys Trp Gly His Asn Ile Thr Glu Phe Gln Gln Arg Phe  
 275 280 285  
 Asp Gly Ile Leu Thr Glu Gly Glu Gly Pro Arg Arg Leu Lys Asn Leu  
 290 295 300  
 Tyr Phe Leu Tyr Leu Ile Glu Leu Arg Ala Leu Ser Lys Val Leu Pro  
 305 310 315 320  
 Phe Phe Glu Arg Pro Asp Phe Gln Leu Phe Thr Gly Asn Lys Ile Gln  
 325 330 335



Asp Trp Tyr Gly Pro Ala Val Val Ala His Ile Leu Arg Lys Ala Val  
 115 120 125

Glu Glu Ala Arg His Pro Asp Leu Gln Gly Ile Thr Ile Tyr Val Ala  
 130 135 140

Gln Asp Cys Thr Val Pro Val Arg Leu Gly Gly Glu Arg Thr Asn Thr  
 145 150 155 160

Asp Tyr Leu Glu Phe Val Lys Gly Ile Leu Ser Leu Glu Tyr Cys Val  
 165 170 175

Gly Ile Ile Gly Gly Lys Pro Lys Gln Ser Tyr Tyr Phe Ala Gly Phe  
 180 185 190

Gln Asp Asp Ser Leu Ile Tyr Met Asp Pro His Tyr Cys Gln Ser Phe  
 195 200 205

Val Asp Val Ser Ile Lys Asp Phe Pro Leu Glu Thr Phe His Cys Pro  
 210 215 220

Ser Pro Xaa Lys Met Ser Phe Arg Lys Met Asp Pro Ser Cys Thr Ile  
 225 230 235 240

Gly Phe Tyr Cys Arg Asn Val Gln Asp Phe Lys Arg Ala Ser Glu Glu  
 245 250 255

Ile Thr Lys Met Leu Lys Phe Ser Ser Lys Glu Lys Tyr Pro Leu Phe  
 260 265 270

Thr Phe Val Asn Gly His Ser Arg Asp Tyr Asp Phe Thr Ser Thr Thr  
 275 280 285

Thr Asn Glu Glu Asp Leu Phe Ser Glu Asp Glu Lys Lys Gln Leu Lys  
 290 295 300

Arg Phe Ser Thr Glu Glu Phe Val Leu Leu  
 305 310

<210> 2038  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Arg Trp Leu Phe Val Leu Met Leu Ser Leu Pro Leu Pro Pro Thr  
 1 5 10 15

Pro Arg Gln Gly Pro Ala Cys Asp Val Pro Leu Pro Val Ser His Val  
 20 25 30

Phe Ser Leu Phe Asn Ser His Leu Gly Ala Arg Thr Cys Gly Val Trp  
 35 40 45

Phe Ser Leu Pro Val Ser Val Cys  
 50 55

The diagram illustrates the experimental design. It shows a participant sitting at a table with a computer. The computer screen displays a stimulus (a word or image). The participant responds by pressing a button. The computer records the response and provides feedback. The sequence repeats for multiple trials. The diagram is divided into sections for 'Stimulus presentation', 'Response', and 'Feedback'.

Met Lys Ala Gln Thr Ala Leu Ser Phe Phe Leu Ile Leu Ile Thr Ser  
1 5 10 15

Pro Met Asn Glu Gln Ile Val Ile Gly Arg Leu Asp Glu Asp Ile Ile  
35 40 45

Leu Pro Ser Ser Phe Glu Arg Gly Ser Glu Val Val Ile His Trp Lys  
50 55 60

Tyr Gln Asp Ser Tyr Lys Val His Ser Tyr Tyr Lys Gly Ser Asp His  
65 70 75 80

Leu Glu Ser Gln Asp Pro Arg Tyr Ala Asn Arg Thr Ser Leu Phe Tyr  
85 90 95

Asn Glu Ile Gln Asn Gly Asn Ala Ser Leu Phe Phe Arg Arg Val Ser  
100 105 110

Leu Leu Asp Glu Gly Ile Tyr Thr Cys Tyr Val Gly Thr Ala Ile Gln  
115 120 125

Val Ile Thr Asn Lys Val Val Leu Lys Val Gly Val Phe Leu Thr Pro  
130 135 140

Val	Met	Lys	Tyr	Glu	Lys	Arg	Asn	Thr	Asn	Ser	Phe	Leu	Ile	Cys	Ser
145					150					155					160

Val Leu Ser Val Tyr Pro Arg Pro Ile Ile Thr Trp Lys Met Asp Asn  
165 170 175

Thr Pro Ile Ser Glu Asn Asn Met Glu Glu Thr Gly Ser Leu Asp Ser  
180 185 190

Phe Ser Ile Asn Ser Pro Leu Asn Ile Thr Gly Ser Asn Ser Ser Tyr  
195 200 205

Glu Cys Thr Ile Glu Asn Ser Leu Leu Lys Gln Thr Trp Thr Gly Arg  
210 215 220

Trp Thr Met Lys Asp Gly Leu His Lys Met Gln Ser Glu His Val Ser  
225 230 235 240

Leu Ser Cys Gln Pro Val Asn Asp Tyr Phe Ser Pro Asn Gln Asp Phe  
245 250 255

Lys Val Thr Trp Ser Arg Met Lys Ser Gly Thr Phe Ser Val Leu Ala  
260 265 270

Tyr Tyr Leu Ser Ser Ser Gln Asn Thr Ile Ile Asn Glu Ser Arg Phe  
1330



Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp  
145 150 155 160

Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly  
165 170 175

Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly  
180 185 190

Lys Lys Gln Lys His Tyr Pro Tyr  
195 200

<210> 2041

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2041

Met Ile Gly Met Ser Thr Lys Ala Val Leu Trp Arg Cys Phe Ser Thr  
1 5 10 15

Val Val Ile Phe Leu Phe Leu Leu Asp Glu Gln Thr Ser Leu Leu Val  
20 25 30

Leu Val Pro Ala Gly Val Gly Ala Ala Ile Glu Leu Trp Lys Val Lys  
35 40 45

Lys Ala Leu Lys Met Thr Ile Phe Trp Arg Gly Leu Met Pro Glu Phe  
50 55 60

Gln Phe Gly Thr Tyr Ser Glu Ser Glu Arg Lys Thr Glu Glu Tyr Asp  
65 70 75 80

Thr Gln Ala Met Lys Tyr Leu Ser Tyr Leu Leu Tyr Pro Leu Cys Val  
85 90 95

Gly Gly Ala Val Tyr Ser Leu Leu Asn Ile Lys Tyr Lys Ser Trp Tyr  
100 105 110

Ser Trp Leu Ile Asn Ser Phe Val Asn Gly Val Tyr Ala Phe Gly Phe  
115 120 125

Leu Phe Met Leu Pro Gln Leu Phe Val Asn Tyr Lys Val Arg Arg Cys  
130 135 140

Val Leu Pro Ala Ala Arg Pro Pro Ser Pro Val Leu Pro Thr Ala Asp  
145 150 155 160

Leu Gly Leu Ser Leu Leu Phe Gln Leu Lys Ser Val Ala His Leu Pro  
165 170 175

Trp Lys Ala Phe Thr Tyr Lys Ala Phe Asn Thr Phe Ile Asp Asp Val  
180 185 190

Phe Ala Phe Ile Ile Thr Met Pro Thr Ser His Arg Leu Ala Cys Phe  
195 200 205





240





<210> 2047  
 <211> 310  
 <212> PRT  
 <213> Homo sapiens

<400> 2047

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Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro
  1          5          10          15

Asp Phe Phe Leu Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val
      20          25          30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser
      35          40          45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
      50          55          60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe
      65          70          75          80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly
      85          90          95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu
      100         105         110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu
      115         120         125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys
      130         135         140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys
      145         150         155         160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn
      165         170         175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn
      180         185         190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala
      195         200         205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp
      210         215         220

Ala Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu
      225         230         235         240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu
      245         250         255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe
      260         265         270

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Tyr Glu Trp Asp Pro Val Arg Gln Gln Cys Lys Asp Ile Asp Glu Cys  
 35 40 45  
 Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys Cys Val Asn His  
 50 55 60  
 Tyr Gly Gly Tyr Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn  
 65 70 75 80  
 Asn Glu Gln Pro Gln Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly  
 85 90 95  
 Ala Thr Thr Gly Val Val Ala Ala Ser Ser Met Ala Thr Ser Gly Val  
 100 105 110  
 Leu Pro Gly Gly Gly Phe Val Ala Ser Ala Ala Val Ala Gly Pro  
 115 120 125  
 Glu Met Gln Thr Gly Arg Asn Asn Phe Val Ile Arg Arg Asn Pro Ala  
 130 135 140  
 Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser His Arg Ile Gln Cys Ala  
 145 150 155 160  
 Ala Gly Tyr Glu Gln Ser Glu His Asn Val Cys Gln Asp Ile Asp Glu  
 165 170 175  
 Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val Cys Ile Asn  
 180 185 190  
 Leu Arg Gly Ser Phe Ala Cys Gln Cys Pro Pro Gly Tyr Gln Lys Arg  
 195 200 205  
 Gly Glu Gln Cys Val Asp Ile Asp Glu Cys Arg Thr Ser Ser Tyr Leu  
 210 215 220  
 Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly Lys Phe Ser Cys Met Cys  
 225 230 235 240  
 Pro Gln Gly Tyr Gln Val Val Arg Ser Arg Thr Cys Gln Asp Ile Asn  
 245 250 255  
 Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu Asp Glu Met Cys Trp Asn  
 260 265 270  
 Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg Asn Pro Cys Gln Asp Pro  
 275 280 285  
 Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val Cys Pro Val Ser Asn Ala  
 290 295 300  
 Met Cys Arg Glu Leu Pro Gln Ser Ile Val Tyr Lys Tyr Met Ser Ile  
 305 310 315 320  
 Arg Ser Asp Arg Ser Val Pro Ser Asp Ile Phe Gln Ile Gln Ala Thr  
 325 330 335  
 Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe Arg Ile Lys Ser Gly Asn  
 340 345 350

Glu Asn Gly Glu Phe Tyr Leu Arg Gln Thr Ser-Pro Val Ser Ala Met  
355 360 365

Leu Val Leu Val Lys Ser Leu Ser Gly Pro Arg Glu His Ile Val Asp  
370 375 380

Leu Glu Met Leu Thr Val Ser Ser Ile Gly Thr Phe Arg Thr Ser Ser  
385 390 395 400

Val Leu Arg Leu Thr Ile Ile Val Gly Pro Phe Ser Phe  
405 410

<210> 2050

<211> 683

<212> PRT

<213> Homo sapiens

<400> 2050

Met Leu Phe Ile Phe Asn Phe Leu Phe Ser Pro Leu Pro Thr Pro Ala  
1 5 10 15

Leu Ile Cys Ile Leu Thr Phe Gly Ala Ala Ile Phe Leu Trp Leu Ile  
20 25 30

Thr Arg Pro Gln Pro Val Leu Pro Leu Leu Asp Leu Asn Asn Gln Ser  
35 40 45

Val Gly Ile Glu Gly Gly Ala Arg Lys Gly Val Ser Gln Lys Asn Asn  
50 55 60

Asp Leu Thr Ser Cys Cys Phe Ser Asp Ala Lys Thr Met Tyr Glu Val  
65 70 75 80

Phe Gln Arg Gly Leu Ala Val Ser Asp Asn Gly Pro Cys Leu Gly Tyr  
85 90 95

Arg Lys Pro Asn Gln Pro Tyr Arg Trp Leu Ser Tyr Lys Gln Val Ser  
100 105 110

Asp Arg Ala Glu Tyr Leu Gly Ser Cys Leu Leu His Lys Gly Tyr Lys  
115 120 125

Ser Ser Pro Asp Gln Phe Val Gly Ile Phe Ala Gln Asn Arg Pro Glu  
130 135 140

Trp Ile Ile Ser Glu Leu Ala Cys Tyr Thr Tyr Ser Met Val Ala Val  
145 150 155 160

Pro Leu Tyr Asp Thr Leu Gly Pro Glu Ala Ile Val His Ile Val Asn  
165 170 175

Lys Ala Asp Ile Ala Met Val Ile Cys Asp Thr Pro Gln Lys Ala Leu  
180 185 190

Val Leu Ile Gly Asn Val Glu Lys Gly Phe Thr Pro Ser Leu Lys Val  
195 200 205



Ile	Ile	Leu	Met	Asp	Pro	Phe	Asp	Asp	Asp	Leu	Lys	Gln	Arg	Gly	Glu	
210						215					220					
Lys	Ser	Gly	Ile	Glu	Ile	Leu	Ser	Leu	Tyr	Asp	Ala	Glu	Asn	Leu	Gly	
225					230					235					240	
Lys	Glu	His	Phe	Arg	Lys	Pro	Val	Pro	Pro	Ser	Pro	Glu	Asp	Leu	Ser	
				245					250					255		
Val	Ile	Cys	Phe	Thr	Ser	Gly	Thr	Thr	Gly	Asp	Pro	Lys	Gly	Ala	Met	
			260					265					270			
Ile	Thr	His	Gln	Asn	Ile	Val	Ser	Asn	Ala	Ala	Ala	Phe	Leu	Lys	Cys	
			275				280					285				
Val	Glu	His	Ala	Tyr	Glu	Pro	Thr	Pro	Asp	Asp	Val	Ala	Ile	Ser	Tyr	
	290					295					300					
Leu	Pro	Leu	Ala	His	Met	Phe	Glu	Arg	Ile	Val	Gln	Ala	Val	Val	Tyr	
305					310					315					320	
Ser	Cys	Gly	Ala	Arg	Val	Gly	Phe	Phe	Gln	Gly	Asp	Ile	Arg	Leu	Leu	
				325					330					335		
Ala	Asp	Asp	Met	Lys	Thr	Leu	Lys	Pro	Thr	Leu	Phe	Pro	Ala	Val	Pro	
			340					345					350			
Arg	Leu	Leu	Asn	Arg	Ile	Tyr	Asp	Lys	Val	Gln	Asn	Glu	Ala	Lys	Thr	
		355					360					365				
Pro	Leu	Lys	Lys	Phe	Leu	Leu	Lys	Leu	Ala	Val	Ser	Ser	Lys	Phe	Lys	
	370					375					380					
Glu	Leu	Gln	Lys	Gly	Ile	Ile	Arg	His	Asp	Ser	Phe	Trp	Asp	Lys	Leu	
385					390					395					400	
Ile	Phe	Ala	Lys	Ile	Gln	Asp	Ser	Leu	Gly	Gly	Arg	Val	Arg	Val	Ile	
				405					410					415		
Val	Thr	Gly	Ala	Ala	Pro	Met	Ser	Thr	Ser	Val	Met	Thr	Phe	Phe	Arg	
			420					425					430			
Ala	Ala	Met	Gly	Cys	Gln	Val	Tyr	Glu	Ala	Tyr	Gly	Gln	Thr	Glu	Cys	
		435					440					445				
Thr	Gly	Gly	Cys	Thr	Phe	Thr	Leu	Pro	Gly	Asp	Trp	Thr	Ser	Gly	His	
	450					455					460					
Val	Gly	Val	Pro	Leu	Ala	Cys	Asn	Tyr	Val	Lys	Leu	Glu	Asp	Val	Ala	
465					470					475					480	
Asp	Met	Asn	Tyr	Phe	Thr	Val	Asn	Asn	Glu	Gly	Glu	Val	Cys	Ile	Lys	
				485					490					495		
Gly	Thr	Asn	Val	Phe	Lys	Gly	Tyr	Leu	Lys	Asp	Pro	Glu	Lys	Thr	Gln	
			500					505					510			
Glu	Ala	Leu	Asp	Ser	Asp	Gly	Trp	Leu	His	Thr	Gly	Asp	Ile	Gly	Arg	
		515					520					525				





Arg Glu Pro Arg Gly Glu Ala His Gln Glu Val Leu Arg Arg Ala Ala  
 100 105 110  
 Lys Asp Leu Pro Ile Tyr Thr Arg Thr Met Ser Gly Ala Ile Arg Tyr  
 115 120 125  
 Cys Asp Arg Cys Gln Leu Ile Lys Pro Asp Arg Cys His His Cys Ser  
 130 135 140  
 Val Cys Asp Lys Cys Ile Leu Lys Met Asp His His Cys Pro Trp Val  
 145 150 155 160  
 Asn Asn Cys Val Gly Phe Ser Asn Tyr Lys Phe Phe Leu Leu Phe Leu  
 165 170 175  
 Ala Tyr Ser Leu Leu Tyr Cys Leu Phe Ile Ala Ala Thr Asp Leu Gln  
 180 185 190  
 Tyr Phe Ile Lys Phe Trp Thr Asn Gly Leu Pro Asp Thr Gln Ala Lys  
 195 200 205  
 Phe His Ile Met Phe Leu Phe Phe Ala Ala Ala Met Phe Ser Val Ser  
 210 215 220  
 Leu Ser Ser Leu Phe Gly Tyr His Cys Trp Leu Val Ser Lys Asn Lys  
 225 230 235 240  
 Ser Thr Leu Glu Ala Phe Arg Ser Pro Val Phe Arg His Gly Thr Asp  
 245 250 255  
 Lys Asn Gly Phe Ser Leu Gly Phe Ser Lys Asn Met Arg Gln Val Leu  
 260 265 270  
 Val Met Arg Arg Ser Thr Gly Cys Tyr Pro Phe Phe Gln Val  
 275 280 285

<210> 2053  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 2053  
 Met Ser His Gly Ser Gln Pro Phe Leu Leu Leu Leu Ser Leu His Ile  
 1 5 10 15  
 Leu Ile Leu Ala Gly Ser Phe Leu Leu Phe Ser Pro Tyr Thr Ala Lys  
 20 25 30  
 Pro Ser Phe Ser Ser Ser Phe Ile Val Phe Pro Arg Ala Glu Met  
 35 40 45

<210> 2054  
 <211> 914  
 <212> PRT  
 <213> Homo sapiens

<400> 2054

Met Gly Pro Phe Lys Ser Ser Val Phe Ile Leu Ile Leu His Leu Leu  
1 5 10 15  
Glu Gly Ala Leu Ser Asn Ser Leu Ile Gln Leu Asn Asn Asn Gly Tyr  
20 25 30  
Glu Gly Ile Val Val Ala Ile Asp Pro Asn Val Pro Glu Asp Glu Thr  
35 40 45  
Leu Ile Gln Gln Ile Lys Asp Met Val Thr Gln Ala Ser Leu Tyr Leu  
50 55 60  
Phe Glu Ala Thr Gly Lys Arg Phe Tyr Phe Lys Asn Val Ala Ile Leu  
65 70 75 80  
Ile Pro Glu Thr Trp Lys Thr Lys Ala Asp Tyr Val Arg Pro Lys Leu  
85 90 95  
Glu Thr Tyr Lys Asn Ala Asp Val Leu Val Ala Glu Ser Thr Pro Pro  
100 105 110  
Gly Asn Asp Glu Pro Tyr Thr Glu Gln Met Gly Asn Cys Gly Glu Lys  
115 120 125  
Gly Glu Arg Ile His Leu Thr Pro Asp Phe Ile Ala Gly Lys Lys Leu  
130 135 140  
Ala Glu Tyr Gly Pro Gln Gly Arg Ala Phe Val His Glu Trp Ala His  
145 150 155 160  
Leu Arg Trp Gly Val Phe Asp Glu Tyr Asn Asn Asp Glu Lys Phe Tyr  
165 170 175  
Leu Ser Asn Gly Arg Ile Gln Ala Val Arg Cys Ser Ala Gly Ile Thr  
180 185 190  
Gly Thr Asn Val Val Lys Lys Cys Gln Gly Gly Ser Cys Tyr Thr Lys  
195 200 205  
Arg Cys Thr Phe Asn Lys Val Thr Gly Leu Tyr Glu Lys Gly Cys Glu  
210 215 220  
Phe Val Leu Gln Ser Arg Gln Thr Glu Lys Ala Ser Ile Met Phe Ala  
225 230 235 240  
Gln His Val Asp Ser Ile Val Glu Phe Cys Thr Glu Gln Asn His Asn  
245 250 255  
Lys Glu Ala Pro Asn Lys Gln Asn Gln Lys Cys Asn Leu Arg Ser Thr  
260 265 270  
Trp Glu Val Ile Arg Asp Ser Glu Asp Phe Lys Lys Thr Thr Pro Met  
275 280 285  
Thr Thr Gln Pro Pro Asn Pro Thr Phe Ser Leu Leu Gln Ile Gly Gln  
290 295 300  
Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly Ser Met Ala Thr Gly  
1345

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625		630		635		640
Glu Leu Leu Asp	Asn Gly Ala Gly Ala Asp	Ala Thr Lys Asp	Asp Gly			
	645		650		655	
Val Tyr Ser Arg	Tyr Phe Thr Thr Tyr	Asp Thr Asn Gly	Arg Tyr Ser			
	660	665	670			
Val Lys Val Arg	Ala Leu Gly Gly Val	Asn Ala Ala Arg	Arg Arg Val			
	675	680	685			
Ile Pro Gln Gln	Ser Gly Ala Leu Tyr	Ile Pro Gly Trp	Ile Glu Asn			
	690	695	700			
Asp Glu Ile Gln	Trp Asn Pro Pro Arg	Pro Glu Ile Asn	Lys Asp Asp			
	705	710	715	720		
Val Gln His Lys	Gln Val Cys Phe Ser	Arg Thr Ser Ser	Gly Gly Ser			
	725	730	735			
Phe Val Ala Ser	Asp Val Pro Asn Ala	Pro Ile Pro Asp	Leu Phe Pro			
	740	745	750			
Pro Gly Gln Ile	Thr Asp Leu Lys Ala	Glu Ile His Gly	Gly Ser Leu			
	755	760	765			
Ile Asn Leu Thr	Trp Thr Ala Pro Gly	Asp Asp Tyr Asp	His Gly Thr			
	770	775	780			
Ala His Lys Tyr	Ile Ile Arg Ile Ser	Thr Ser Ile Leu	Asp Leu Arg			
	785	790	795	800		
Asp Lys Phe Asn	Glu Ser Leu Gln Val	Asn Thr Thr Ala	Leu Ile Pro			
	805	810	815			
Lys Glu Ala Asn	Ser Glu Glu Val Phe	Leu Phe Lys Pro	Glu Asn Ile			
	820	825	830			
Thr Phe Glu Asn	Gly Thr Asp Leu Phe	Ile Ala Ile Gln	Ala Val Asp			
	835	840	845			
Lys Val Asp Leu	Lys Ser Glu Ile Ser	Asn Ile Ala Arg	Val Ser Leu			
	850	855	860			
Phe Ile Pro Pro	Gln Thr Pro Pro Glu	Thr Pro Ser Pro	Asp Glu Thr			
	865	870	875	880		
Ser Ala Pro Cys	Pro Asn Ile His Ile	Asn Ser Thr Ile	Pro Gly Ile			
	885	890	895			
His Ile Leu Lys	Ile Met Trp Lys Trp	Ile Gly Glu Leu	Gln Leu Ser			
	900	905	910			
Ile Ala						

<210> 2055  
 <211> 83

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<210> 2056
<211> 68
<212> PRT
<213> Homo sapiens
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<210> 2057
<211> 73
<212> PRT
<213> Homo sapiens
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<400> 2057
Met Glu Leu Leu Lys Cys Ser Trp Gln Leu Phe Phe Ser Phe Leu Thr
 1                      5                      10                      15
His Cys Ser Ala Ser Thr Ile Val Trp Leu Phe Val Gln His Arg Leu
                20                      25                      30
Ser Gln Ser His Asn Lys Pro Phe Phe Gly Ile Leu Gln Arg Cys His
                                     1348

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35

40

45

Ser Trp His Leu Asn Arg Glu Ser Phe Val Pro Asn Gln Ser Phe Ser  
50 55 60

Ile Tyr Glu Ser Cys Ser Ile Arg Lys  
65 70

&lt;210&gt; 2058

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2058

Met Gln Val Phe Phe Leu Ser Glu Ile Gly Met Leu Trp Val Val Val  
1 5 10 15

Lys Met Ala His Ser Ala Met Leu Val Ser His Thr Gln Asp Pro Thr  
20 25 30

Pro Ser Arg Trp Pro Cys Ser Leu Ala Gln Ser Ile Leu Leu Thr Cys  
35 40 45

Ser Pro Gln His Arg Phe Ser Leu Glu Arg Lys Ile Gln Leu Pro Pro  
50 55 60

Arg Arg Trp Trp Ala Glu Gly Arg Glu Gly Cys Trp Val Arg Glu Arg  
65 70 75 80

Val Gly Glu Arg Thr  
85

&lt;210&gt; 2059

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2059

Met Leu Thr Leu Thr His Phe Val Ser Tyr Asp Tyr Phe Ile Val Lys  
1 5 10 15

Arg Leu Val Gly Trp Leu Val Gly Trp Leu Val Cys Phe Val Leu Val  
20 25 30

Ser Pro Phe Ile His Ser Leu Ser Thr Asn Tyr Asn Phe Leu Cys Phe  
35 40 45

Met Cys Gly  
50

&lt;210&gt; 2060

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens





Ser Asp Gly Arg Lys Glu Arg Arg Arg Thr Thr Phe Leu Arg Cys Cys  
                   20                                  25                                  30

Asp Phe Ile Met Lys Pro Ser Pro Ala Leu Ile Leu Val Thr Ser Val  
           35                                  40                                  45

Gly Pro Val Leu Leu Gln Asn Ala Ser Trp Val Ser Val Cys Arg Thr  
           50                                  55                                  60

Leu Leu Ser  
   65

<210> 2063  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 2063  
 Met Tyr Phe Phe Phe Phe Leu Thr Phe Leu Ala Leu Trp Val Met Gly  
   1                                  5                                  10                                  15

Thr Thr Ala Met Ala Ser Pro Phe Phe Met Gly Tyr Gln Leu Gln Tyr  
                   20                                  25                                  30

Gly Pro Gln Cys Cys Ser Gly His Phe Asn Asp  
           35                                  40

<210> 2064  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 2064  
 Met Cys Glu Gly Trp Leu His Pro Ile Phe Leu Tyr Cys Cys Phe Trp  
   1                                  5                                  10                                  15

Thr Thr Thr Pro Ser Cys Ser Ala Phe Gly Ile Leu Asp Leu His Gln  
                   20                                  25                                  30

Gln His Pro Ile Pro Thr Pro Ser Ser Trp Phe Ser Gly Leu Cys Pro  
           35                                  40                                  45

Trp Thr Glu Leu His His Cys Leu Arg  
   50                                  55

<210> 2065  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 2065  
 Met Ile Ile Cys Leu Ile Met Phe Tyr Phe Ile Ala Leu Ala Gly Ala  
   1                                  5                                  10                                  15

His Lys Arg Val Val Ile Gln Leu Arg Glu Gln Leu Ser Leu Glu Ser  
 20 25 30  
 Arg Asp Lys Cys Tyr Leu Ile Gln Lys Leu Thr Glu Ala Gln Arg Asp  
 35 40 45  
 Met Arg Asn  
 50

<210> 2066  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens

<400> 2066

Met Ala Cys Leu Lys Thr Gln Arg Ala Pro Lys Ala Phe Leu Leu Leu  
 1 5 10 15  
 Pro Leu Leu Leu Tyr Phe Ala Gly Leu Ser Lys Leu Thr Gln Leu Gln  
 20 25 30  
 Val Cys Ser Gly Thr Asp Glu Asp Pro Asp Asp Lys Asn Ala Pro Phe  
 35 40 45  
 Arg Gln Arg Pro Phe Cys Lys Tyr Lys Gly His Thr Ala Asp Leu Leu  
 50 55 60  
 Asp Leu Ser Trp Ser Lys Asn Tyr Phe Leu Leu Ser Ser Ser Met Asp  
 65 70 75 80  
 Lys Thr Val Arg Leu Trp His Ile Ser Arg Arg Glu Cys Leu Cys Cys  
 85 90 95  
 Phe Gln His Ile Asp Phe Val Thr Ala Ile Ala Phe His Pro Arg Asp  
 100 105 110  
 Asp Arg Tyr Phe Leu Ser Gly Ser Leu Asp Gly Lys Leu Arg Leu Trp  
 115 120 125  
 Asn Ile Pro Asp Lys Lys Val Ala Leu Trp Asn Glu Val Asp Gly Gln  
 130 135 140  
 Thr Lys Leu Ile Thr Ala Ala Asn Phe Cys Gln Asn Gly Lys Tyr Ala  
 145 150 155 160  
 Val Ile Gly Thr Tyr Asp Gly Arg Cys Ile Phe Tyr Asp Thr Glu His  
 165 170 175  
 Leu Lys Tyr His Thr Gln Ile His Val Arg Ser Thr Arg Gly Arg Asn  
 180 185 190  
 Lys Val Gly Arg Lys Ile Thr Gly Ile Glu Pro Leu Pro Gly Glu Asn  
 195 200 205  
 Lys Ile Leu Val Thr Ser Asn Asp Ser Arg Ile Arg Leu Tyr Asp Leu  
 210 215 220  
 Arg Asp Leu Ser Leu Ser Met Lys Tyr Lys Gly Tyr Val Asn Ser Ser

1353

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1 5 10 15  
 Ala Arg Gln Lys Val Lys Leu Cys Phe Leu Leu Met Leu Leu Ala Thr  
 20 25 30  
 Trp Lys Arg Arg Arg Gly Arg Gly Lys Arg Gly Arg Ser  
 35 40 45

<210> 2075  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 2075  
 Met Val Thr Leu Ala Glu Leu Leu Val Leu Leu Ala Ala Leu Leu Ala  
 1 5 10 15  
 Thr Val Ser Gly Tyr Phe Val Ser Ile Asp Ala His Ala Glu Glu Cys  
 20 25 30  
 Phe Phe Glu Arg Val Thr Ser Gly Thr Lys Met Gly Leu Ile Phe Glu  
 35 40 45  
 Val Ala Glu Gly Gly Phe Leu Asp Ile Asp Val Glu Ile Thr Gly Pro  
 50 55 60  
 Asp Asn Lys Gly Ile Tyr Lys Gly Asp Arg Glu Ser Ser Gly Lys Tyr  
 65 70 75 80  
 Thr Phe Ala Ala His Met Asp Gly Thr Tyr Lys Phe Cys Phe Ser Asn  
 85 90 95  
 Arg Met Ser Thr Met Thr Pro Lys Ile Val Met Phe Thr Ile Asp Ile  
 100 105 110  
 Gly Glu Ala Pro Lys Gly Gln Asp Met Glu Thr Glu Ala His Gln Asn  
 115 120 125  
 Lys Leu Glu Glu Met Ile Asn Glu Leu Ala Val Ala Met Thr Ala Val  
 130 135 140  
 Lys His Glu Gln Glu Tyr Met Glu Val Arg Glu Arg Ile His Arg Ala  
 145 150 155 160  
 Ile Asn Asp Asn Thr Asn Ser Arg Val Val Leu Trp Ser Phe Phe Glu  
 165 170 175  
 Ala Leu Val Leu Val Ala Met Thr Leu Gly Gln Ile Tyr Tyr Leu Lys  
 180 185 190  
 Arg Phe Phe Glu Val Arg Arg Val Val  
 195 200

<210> 2076  
 <211> 201  
 <212> PRT



50	55	60
Ser Asn Arg Phe Val Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile		
65	70	75 80
Lys Glu Pro Ala Glu Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser		
	85	90 95
Leu Asp Ala Phe Pro Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln		
	100	105 110
Leu Leu Thr Ala Phe Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr		
	115	120 125
Pro Leu Phe Lys Val Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln		
	130	135 140
Lys Ile Ile Pro Val Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala		
145	150	155 160
Met Arg Ile Arg Leu Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu		
	165	170 175
Asp Glu Pro Thr Val Asn Thr Gln Ile Phe Pro His Val Val His Gly		
	180	185 190
Phe Leu Asp Thr Asn Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met		
	195	200 205
Leu Leu Leu Ala Pro Lys Leu Asn Glu Ala Asn Leu Asn Val Glu Leu		
	210	215 220
Met Lys His Phe Ala Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile		
225	230	235 240
Arg Cys Asn Thr Thr Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser		
	245	250 255
Ala Ser Thr Arg His Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr		
	260	265 270
Arg Asp Pro Phe Ala Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala		
	275	280 285
Ala Thr His Asn Leu Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu		
	290	295 300
Pro Val Leu Cys Gly Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp		
305	310	315 320
Gln Ala Phe Lys Ala Ile Arg Ser Phe Leu Ser Lys Leu Glu Ser Val		
	325	330 335
Ser Glu Asp Pro Thr Gln Leu Glu Glu Val Glu Lys Asp Val His Ala		
	340	345 350
Ala Ser Ser Pro Gly Met Gly Gly Ala Ala Ala Ser Trp Ala Gly Trp		
	355	360 365
Ala Val Thr Gly Val Ser Ser Leu Thr Ser Lys Leu Ile Arg Ser His		





<210> 2081  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 2081  
 Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu  
 1 5 10 15  
 Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Ala  
 20 25 30  
 Thr Ala Ala Arg Gly Ala Leu Glu Lys Ala Ser Gly Gln Arg Arg Glu  
 35 40 45  
 Pro Glu Met Gln Arg Pro Glu Ala Ala Arg Ser Leu Pro Glu Gly Thr  
 50 55 60  
 Val Pro Pro Glu Val Glu Glu Pro Pro Pro Leu Cys His Leu Glu Gln  
 65 70 75 80  
 Leu Trp Arg Cys Ser Ser Pro Leu Ala Gln Ser Phe Cys Gly Ser Gly  
 85 90 95  
 Ser Gly Trp Pro Arg Pro Ala Cys Ala Leu Pro Leu Cys Pro Pro Pro  
 100 105 110  
 Cys Ala Gly Ala Pro Cys Cys Thr Ala Ser Ala Ala Ala Ala Arg Ala  
 115 120 125  
 Arg Trp Cys Trp Arg Gln Ser Phe Trp Ser Pro Trp Ser Arg Thr Cys  
 130 135 140  
 Pro Pro  
 145

<210> 2082  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2082  
 Met Arg Leu Phe Ser Gln Met Leu Lys Ser Trp Met Ala Leu Phe Met  
 1 5 10 15  
 Arg Asn Val Trp Leu Glu Met Thr Ile Ala Thr Xaa Ile Gln  
 20 25 30

<210> 2083  
 <211> 56



<212> PRT  
<213> Homo sapiens

<400> 2083

Met Arg Leu Phe Ser Gln Met Leu Lys Ser Trp Met Ala Leu Phe Met  
1 5 10 15  
Arg Asn Val Trp Leu Glu Met Thr Ile Ala Thr Ala His Thr Val Ser  
20 25 30  
Thr Val His Trp Arg Lys Trp Thr Lys Met Leu Val Gln Ser Pro Thr  
35 40 45  
Gln Val Lys Met Asn Val Ser Gln  
50 55

<210> 2084

<211> 563

<212> PRT

<213> Homo sapiens

<400> 2084

Met Gly Ser Leu Ser Asn Tyr Ala Leu Leu Gln Leu Thr Leu Thr Ala  
1 5 10 15  
Phe Leu Thr Ile Leu Val Gln Pro Gln His Leu Leu Ala Pro Val Phe  
20 25 30  
Arg Thr Leu Ser Ile Leu Thr Asn Gln Ser Asn Cys Trp Leu Cys Glu  
35 40 45  
His Leu Asp Asn Ala Glu Gln Pro Glu Leu Val Phe Val Pro Ala Ser  
50 55 60  
Ala Ser Thr Trp Trp Thr Tyr Ser Gly Gln Trp Met Tyr Glu Arg Val  
65 70 75 80  
Trp Tyr Pro Gln Ala Glu Val Gln Asn His Ser Thr Ser Ser Tyr Arg  
85 90 95  
Lys Val Thr Trp His Trp Glu Ala Ser Met Glu Ala Gln Gly Leu Ser  
100 105 110  
Phe Ala Gln Val Arg Leu Leu Glu Gly Asn Phe Ser Leu Cys Val Glu  
115 120 125  
Asn Lys Asn Gly Ser Gly Pro Phe Leu Gly Asn Ile Pro Lys Gln Tyr  
130 135 140  
Cys Asn Gln Ile Leu Trp Phe Asp Ser Thr Asp Gly Thr Phe Met Pro  
145 150 155 160  
Ser Ile Asp Val Thr Asn Glu Ser Arg Asn Asp Asp Asp Asp Pro Ser  
165 170 175  
Val Cys Leu Gly Thr Arg Gln Cys Ser Trp Phe Ala Gly Cys Thr Asn  
180 185 190



Arg Lys Ser Arg Arg Ser Leu Asn Ser Gln Pro Leu Asn Leu Ala Leu  
515 520 525

Ser Pro Gln Gln Ser Ala Gln Leu Leu Val Ser Glu Thr Ser Cys Gln  
530 535 540

Val Ser Asn Arg Ala Met Lys Gly Leu Thr Thr His Gln Tyr Asp Thr  
545 550 555 560

Ser Leu Leu

<210> 2085  
<211> 599  
<212> PRT  
<213> Homo sapiens

<400> 2085  
Met Glu Leu Leu Gly Pro Val Pro Pro Glu Gln Gln Phe Ile Asn Gln  
1 5 10 15

Lys Met Arg Pro Gly Ser Gly Met Leu Ser Ile Arg Val Ile Pro Asp  
20 25 30

Gly Pro Thr Arg Ala Leu Gln Ile Thr Asp Phe Cys His Arg Lys Ser  
35 40 45

Ser Arg Ser Tyr Glu Val Asp Glu Leu Pro Val Thr Glu Gln Glu Leu  
50 55 60

Gln Lys Leu Lys Asn Pro Asp Thr Glu Gln Glu Leu Glu Val Leu Val  
65 70 75 80

Arg Leu Glu Gly Gly Ile Gly Leu Ser Leu Ile Asn Lys Val Pro Glu  
85 90 95

Glu Leu Val Phe Ala Ser Leu Thr Gly Ile Asn Val His Tyr Thr Gln  
100 105 110

Leu Ala Thr Ser His Met Leu Glu Leu Ser Ile Gln Asp Val Gln Val  
115 120 125

Asp Asn Gln Leu Ile Gly Thr Thr Gln Pro Phe Met Leu Tyr Val Thr  
130 135 140

Pro Leu Ser Asn Glu Asn Glu Val Ile Glu Thr Gly Pro Ala Val Gln  
145 150 155 160

Val Asn Ala Val Lys Phe Pro Ser Lys Ser Ala Leu Thr Asn Ile Tyr  
165 170 175

Lys His Leu Met Ile Thr Ala Gln Arg Phe Thr Val Gln Ile Glu Glu  
180 185 190

Lys Leu Leu Leu Lys Leu Leu Ser Phe Phe Gly Tyr Asp Gln Ala Glu  
195 200 205

Ser Glu Val Glu Lys Tyr Asp Glu Asn Leu His Glu Lys Thr Ala Glu

210	215	220
Gln Gly Gly Thr Pro Ile Arg Tyr Tyr Phe Glu Asn Leu Lys Ile Ser		
225	230	235 240
Ile Pro Gln Ile Lys Leu Ser Val Phe Thr Ser Asn Lys Leu Pro Leu		
	245	250 255
Asp Leu Lys Ala Leu Lys Ser Thr Leu Gly Phe Pro Leu Ile Arg Phe		
	260	265 270
Glu Asp Ala Val Ile Asn Leu Asp Pro Phe Thr Arg Val His Pro Tyr		
	275	280 285
Glu Thr Lys Glu Phe Ile Ile Asn Asp Ile Leu Lys His Phe Gln Glu		
	290	295 300
Glu Leu Leu Ser Gln Ala Ala Arg Ile Leu Gly Ser Val Asp Phe Leu		
	305	310 315 320
Gly Asn Pro Met Gly Leu Leu Asn Asp Val Ser Glu Gly Val Thr Gly		
	325	330 335
Leu Ile Lys Tyr Gly Asn Val Gly Gly Leu Ile Arg Asn Val Thr His		
	340	345 350
Gly Val Ser Asn Ser Ala Gly Lys Phe Ala Gly Thr Leu Ser Asp Gly		
	355	360 365
Leu Gly Lys Thr Met Asp Asn Arg His Gln Ser Glu Arg Glu Tyr Ile		
	370	375 380
Arg Tyr His Ala Ala Thr Ser Gly Glu His Leu Val Ala Gly Ile His		
	385	390 395 400
Gly Leu Ala His Gly Ile Ile Gly Gly Leu Thr Ser Val Ile Thr Ser		
	405	410 415
Thr Val Glu Gly Val Lys Thr Glu Gly Gly Val Ser Gly Phe Ile Ser		
	420	425 430
Gly Leu Gly Lys Gly Leu Val Gly Thr Val Thr Lys Pro Val Ala Gly		
	435	440 445
Ala Leu Asp Phe Ala Ser Glu Thr Ala Gln Ala Val Arg Asp Thr Ala		
	450	455 460
Thr Leu Ser Gly Pro Arg Thr Gln Ala Gln Arg Val Arg Lys Pro Arg		
	465	470 475 480
Cys Cys Thr Gly Pro Gln Gly Leu Leu Pro Arg Tyr Ser Glu Ser Gln		
	485	490 495
Ala Glu Gly Gln Glu Gln Leu Phe Lys Leu Thr Asp Asn Ile Gln Asp		
	500	505 510
Glu Phe Phe Ile Ala Val Glu Asn Ile Asp Ser Tyr Cys Val Leu Ile		
	515	520 525
Ser Ser Lys Ala Val Tyr Phe Leu Lys Ser Gly Asp Tyr Val Asp Arg		

530 535 540

Glu Ala Ile Phe Leu Glu Val Lys Tyr Asp Asp Leu Leu Pro Leu Pro  
545 550 555 560

Cys Leu Gln Arg Pro Trp Glu Gly Val Cys Ala Gly Asp Gln Glu Ser  
565 570 575

Arg Glu His Glu Gln Trp Ser Val His Pro Arg Pro Leu Pro Pro Glu  
580 585 590

Ala His Gly Pro Cys Glu Ile  
595

<210> 2086  
<211> 239  
<212> PRT  
<213> Homo sapiens

<400> 2086

Met Ala Pro Leu Leu Pro Ser Leu Pro Leu His Leu His Thr Ser Leu  
1 5 10 15

Cys Leu Arg Leu Cys Leu Ser Leu Ser Leu Ser Ala Trp Leu Ser Trp  
20 25 30

Ser Leu Pro Leu Cys Val Ser Leu Ser Ala Ser Tyr Pro Ala Trp Arg  
35 40 45

Leu Leu Pro Gln Leu His Gly Arg Ser Arg Glu Gln Arg Tyr Thr Lys  
50 55 60

Leu Ala Asp Trp Gln Tyr Ile Glu Glu Cys Val Gln Ala Ala Ser Pro  
65 70 75 80

Met Pro Leu Phe Gly Asn Gly Asp Ile Leu Ser Phe Glu Asp Ala Asn  
85 90 95

Arg Ala Met Gln Thr Gly Val Thr Gly Ile Met Ile Ala Arg Gly Ala  
100 105 110

Leu Leu Lys Pro Trp Leu Phe Thr Glu Ile Lys Glu Gln Arg His Trp  
115 120 125

Asp Ile Ser Ser Ser Glu Arg Leu Asp Ile Leu Arg Asp Phe Thr Asn  
130 135 140

Tyr Gly Leu Glu His Trp Gly Ser Asp Thr Gln Gly Val Glu Lys Thr  
145 150 155 160

Arg Arg Phe Leu Leu Glu Trp Leu Ser Phe Leu Cys Arg Tyr Val Pro  
165 170 175

Val Gly Leu Leu Glu Arg Leu Pro Gln Arg Ile Asn Glu Arg Pro Pro  
180 185 190

Tyr Tyr Leu Gly Arg Asp Tyr Leu Glu Thr Leu Met Ala Ser Gln Lys  
195 200 205

Ala Ala Asp Trp Ile Arg Ile Ser Glu Met Leu Leu Gly Pro Val Pro  
210 215 220

Pro Ser Phe Ala Phe Leu Pro Lys His Lys Ala Asn Ala Tyr Lys  
225 230 235

<210> 2087  
<211> 127  
<212> PRT  
<213> Homo sapiens

<400> 2087  
Met Ala Gln Tyr Ile Leu Val Ile Ile Leu Ile Ser Phe Cys Ser Asp  
1 5 10 15  
Ser Leu Ser Gly Arg Ala Gln Asn Gly Thr Glu Ile Asn Gln Thr Val  
20 25 30  
Ile Leu Ile Cys Ser Leu Arg Phe Phe Lys Ser Glu Ala Ile Asp Ala  
35 40 45  
Cys Leu Met His Pro His Thr Ala Cys Leu Thr Gly Asp Ala Thr Leu  
50 55 60  
Leu Ser Ser Ser Ala Met Lys His Lys Arg Gln Arg Lys Ser Arg Tyr  
65 70 75 80  
Thr Ser His Arg Glu His Phe Arg Val Pro Gln Arg Trp Trp Gln Glu  
85 90 95  
Ala His Ser Arg Val Ser Ile Arg Val Cys Val Trp Val Ser Gly Ile  
100 105 110  
Ser Val Ala Pro Ile Phe Leu His Cys Ser Glu His Pro Val Leu  
115 120 125

<210> 2088  
<211> 138  
<212> PRT  
<213> Homo sapiens

<400> 2088  
Met Lys Met Met Val Val Leu Leu Met Leu Ser Ser Leu Ser Arg Leu  
1 5 10 15  
Leu Gly Leu Met Arg Pro Ser Ser Leu Arg Gln Tyr Leu Asp Ser Val  
20 25 30  
Pro Leu Pro Pro Cys Gln Glu Gln Gln Pro Lys Ala Ser Ala Glu Leu  
35 40 45  
Asp His Lys Ala Cys Tyr Leu Cys His Ser Leu Leu Met Leu Ala Gly  
50 55 60  
Val Val Val Ser Cys Gln Asp Ile Thr Pro Asp Gln Trp Gly Glu Leu

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[illegible]

Met Leu Pro Trp Thr Ala Xaa Gly Leu Ala Leu Ser Leu Arg Leu Ala  
1 5 10 15

Gly Asp Leu Met Phe Leu Leu Asp Ser Ser Ala Ser Val Ser His Tyr  
35 40 45

Glu Phe Ser Arg Val Arg Glu Phe Val Gly Gln Leu Val Ala Pro Leu  
50 55 60

Pro Leu Gly Thr Gly Ala Leu Arg Ala Ser Leu Val His Val Gly Ser  
65 70 75 80

Arg Pro Tyr Thr Glu Phe Pro Phe Gly Gln His Ser Ser Gly Glu Ala  
 - 85 90 95

Ala Gln Asp Ala Val Arg Ala Ser Ala Gln Arg Met Gly Asp Thr His  
100 105 110

Thr-Gly Leu Ala Leu Val Tyr Ala Lys Glu Gln Leu Phe Ala Glu Ala  
115 120 125

Ser Gly Ala Arg Pro Gly Val Pro Lys Val Leu Val Trp Val Thr Asp  
130 135 140

Gly Gly Ser Ser Asp Pro Val Gly Pro Pro Met Gln Glu Leu Lys Asp  
145 150 155 160

Leu Gly Val Thr Val Phe Ile Val Ser Thr Gly Arg Gly Asn Phe Leu  
165 170 175

Glu Leu Ser Ala Ala Ala Ser Ala Pro Ala Glu Lys His Leu His Phe  
180 185 190

Val	Asp	Val	Asp	Asp	Leu	His	Ile	Ile	Val	Gln	Glu	Leu	Arg	Gly	Ser
		195					200					205			

Ile Leu Asp Ala Met Arg Pro  
- 210 215

<211> 127

<212> PRT

<213> Ноппе

Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro  
1 5 10 15

Ala Cys Val Ala Ala His Gly Phe Arg-Ile His Asp Tyr Leu Tyr Phe  
20 25 30

1376



Thr Phe Glu Leu Leu Gln Pro Pro Trp Thr Phe Trp  
 180 185

<210> 2099  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2099  
 Met Leu Val Leu Phe Lys Phe Leu Pro Leu Thr Ser Ser Gly Arg Phe  
 1 5 10 15  
 Leu Ser Val Thr Leu Tyr His Arg Val His His Gln Thr Phe Phe Ala  
 20 25 30  
 Gly Ala Lys Ser Phe Ser Pro Ala Ser Thr Leu Asn Leu Tyr Ile Cys  
 35 40 45  
 Ser Ser Gln Phe Gln Ser Leu Gln Lys Leu Tyr Cys Gly Val Ile Pro  
 50 55 60  
 Val Leu Arg Tyr Ala Ser Ile Glu  
 65 70

<210> 2100  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 2100  
 Met Ala Tyr Leu Thr Leu Phe Gln Met Gly Ser Trp Met Ser Phe Ser  
 1 5 10 15  
 Leu Ser Leu Cys Ser Leu Leu Phe Ile Leu Thr Gly His Cys Leu Ser  
 20 25 30  
 Glu Asn Phe Tyr Val Arg Gly Asp Gly Thr Arg Ala Tyr Phe Phe Thr  
 35 40 45  
 Lys Gly Glu Val His Ser Met Phe Cys Lys Ala Ser Leu Asp Glu Lys  
 50 55 60  
 Gln Asn Leu Val Asp Arg Arg Leu Gln Val Asn Arg Lys Lys Gln Val  
 65 70 75 80  
 Lys Met His Arg Val Trp Ile Gln Gly Lys Phe Gln Lys Pro Leu His  
 85 90 95  
 Gln Thr Gln Asn Ser Ser Asn Met Val Ser Thr Leu Leu Ser Gln Asp  
 100 105 110

<210> 2101  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 2101  
 Met Gly Trp Ile Asp Leu Leu Leu Pro Glu Leu Gly Ala Leu Arg Val  
   1                  5                  10                  15  
 Phe Leu His Leu Phe Leu Val Ala Leu Arg Thr Lys Arg Trp Ile Phe  
                   20                  25                  30  
 Arg Thr Leu Gly Gln Leu Thr Cys Val Asn Ile Leu Gly Asp Ser Arg  
           35                  40                  45  
 Lys Lys Arg Glu Cys Arg Leu Asn Lys Arg Gln Leu Gln Phe Gly Glu  
       50                  55                  60  
 Lys Thr Leu Gln Val Pro Glu Arg Leu Val Val Arg His Ser Pro Phe  
       65                  70                  75                  80

<210> 2102  
 <211> 49  
 <212> PRT  
 <213> Homo sapiens

<400> 2102  
 Met Gln Val Ser Ser Trp Val Val Phe Gln Leu Val Trp Asn Ser Leu  
   1                  5                  10                  15  
 Val Leu Thr Gln Thr Gly Ile Lys His Tyr Phe Arg Phe Ser Leu Cys  
                   20                  25                  30  
 Gln Phe Leu Ser Ser Tyr Asn His Val Asn Gln Asp Val Arg Thr Ser  
       35                  40                  45  
 Ile

<210> 2103  
 <211> 179  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (143)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2103  
 Met Ala Gln Val Leu Ala Ser Glu Leu Ser Leu Val Ala Phe Ile Leu  
   1                  5                  10                  15

Leu Leu Val Met Ala Phe Ser Lys Lys Trp Leu Asp Leu Ser Arg Ser  
 20 25 30

Leu Phe Tyr Gln Arg Trp Pro Val Asp Val Ser Asn Arg Ile His Thr  
 35 40 45

Ser Ala His Val Met Ser Met Gly Leu Leu His Phe Cys Lys Ser Arg  
 50 55 60

Ser Cys Ser Asp Leu Glu Asn Gly Lys Val Thr Phe Ile Phe Ser Thr  
 65 70 75 80

Leu Met Leu Phe Pro Ile Asn Ile Trp Ile Phe Glu Leu Glu Arg Asn  
 85 90 95

Val Ser Ile Pro Ile Gly Trp Ser Tyr Phe Ile Gly Trp Leu Val Leu  
 100 105 110

Ile Leu Tyr Phe Thr Cys Ala Ile Leu Cys Tyr Phe Asn His Lys Ser  
 115 120 125

Phe Trp Ser Leu Ile Leu Ser His Pro Ser Gly Ala Val Ser Xaa Ser  
 130 135 140

Ser Ser Phe Gly Ser Val Glu Glu Ser Pro Arg Ala Gln Thr Ile Thr  
 145 150 155 160

Asp Thr Pro Ile Thr Gln Glu Gly Val Leu Asp Pro Glu Gln Lys Asp  
 165 170 175

Thr His Val

<210> 2104  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2104  
 Met Pro Pro Leu Ala Pro Gln Leu Cys Arg Ala Val Phe Leu Val Pro  
 1 5 10 15

Ile Leu Leu Leu Leu Gln Val Lys Pro Leu Asn Gly Ser Pro Gly Pro  
 20 25 30

Lys Asp Gly Ser Gln Thr Glu Lys Thr Pro Ser Ala Asp Gln Asn Gln  
 35 40 45

Glu Gln Phe Glu Glu His Phe Val Ala Ser Ser Val Gly Glu Met Trp  
 50 55 60

Gln Val Val Asp Met Ala Gln Gln Glu Glu Asp Gln Ser Ser Lys Thr  
 65 70 75 80

Ala Ala Val His Lys His Ser Phe His Leu Ser Phe Cys Phe Ser Leu  
 85 90 95

Ala Ser Val Met Val Phe Ser Gly Gly Pro Leu Arg Arg Thr Phe Pro  
 1380





Arg	Arg	Asn	Trp	Cys	Ser	Tyr	Val	Val	Thr	Arg	Thr	Ile	Ser	Cys	His
		35					40					45			
Val	Gln	Asn	Gly	Thr	Tyr	Leu	Gln	Arg	Val	Leu	Gln	Asn	Cys	Pro	Trp
	50					55					60				
Pro	Met	Ser	Cys	Pro	Gly	Ser	Ser	Tyr	Arg	Thr	Val	Val	Arg	Pro	Thr
	65				70					75					80
Tyr	Lys	Val	Met	Tyr	Lys	Ile	Val	Thr	Ala	Arg	Glu	Trp	Arg	Cys	Cys
			85						90					95	
Pro	Gly	His	Ser	Gly	Val	Ser	Cys	Glu	Glu	Val	Ala	Ala	Ser	Ser	Ala
			100					105						110	
Ser	Leu	Glu	Pro	Met	Trp	Ser	Gly	Ser	Thr	Met	Arg	Arg	Met	Ala	Leu
	115						120					125			
Arg	Pro	Thr	Ala	Phe	Ser	Gly	Cys	Leu	Asn	Cys	Ser	Lys	Val	Ser	Glu
	130					135						140			
Leu	Thr	Glu	Arg	Leu	Lys	Val	Leu	Glu	Ala	Lys	Met	Thr	Met	Leu	Thr
	145				150					155					160
Val	Ile	Glu	Gln	Pro	Val	Pro	Pro	Thr	Pro	Ala	Thr	Pro	Glu	Asp	Pro
				165					170					175	
Ala	Pro	Leu	Trp	Gly	Pro	Pro	Pro	Ala	Gln	Gly	Ser	Pro	Gly	Asp	Gly
			180					185						190	
Gly	Leu	Gln	Asp	Gln	Val	Gly	Ala	Trp	Gly	Leu	Pro	Gly	Pro	Thr	Gly
	195						200					205			
Pro	Lys	Gly	Asp	Ala	Gly	Ser	Arg	Gly	Pro	Met	Gly	Met	Arg	Gly	Pro
	210					215					220				
Pro	Gly	Pro	Gln	Gly	Pro	Pro	Gly	Ser	Pro	Gly	Arg	Ala	Gly	Ala	Val
	225				230					235					240
Gly	Thr	Pro	Gly	Glu	Arg	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly
				245					250					255	
Pro	Pro	Gly	Pro	Pro	Ala	Pro	Val	Gly	Pro	Pro	His	Ala	Arg	Ile	Ser
			260					265					270		
Gln	His	Gly	Asp	Pro	Leu	Leu	Ser	Asn	Thr	Phe	Thr	Glu	Thr	Asn	Asn
		275					280					285			
His	Trp	Pro	Gln	Gly	Pro	Thr	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Met
	290					295						300			
Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Thr	Gly	Val	Pro	Gly	Ser	Pro	Gly
	305				310					315					320
Xaa	Ile	Gly	Pro	Pro	Gly	Pro	Thr	Gly	Pro	Lys	Gly	Ile	Ser	Gly	His
			325						330					335	
Pro	Gly	Glu	Lys	Gly	Glu	Lys	Lys	Xaa	Leu	Arg	Gly	Glu	Pro	Gly	Pro
			340					345					350		



His Leu Asn Tyr Arg Gln Lys Gly Val Ile Asp Val Phe Leu His Ala  
 165 170 175  
 Trp Lys Gly Tyr Arg Lys Phe Ala Trp Gly His Asp Glu Leu Lys Pro  
 180 185 190  
 Val Ser Arg Ser Phe Ser Glu Trp Phe Gly Leu Gly Leu Thr Leu Ile  
 195 200 205  
 Asp Ala Leu Asp Thr Met Trp Ile Leu Gly Leu Arg Lys Glu Phe Glu  
 210 215 220  
 Glu Ala Arg Lys Trp Val Ser Lys Lys Leu His Phe Glu Lys Asp Val  
 225 230 235 240  
 Asp Val Asn Leu Phe Glu Ser Thr Ile Arg Ile Leu Gly Gly Leu Leu  
 245 250 255  
 Ser Ala Tyr His Leu Ser Gly Asp Ser Leu Phe Leu Arg Lys Ala Glu  
 260 265 270  
 Asp Phe Gly Asn Arg Leu Met Pro Ala Phe Arg Thr Pro Ser Lys Ile  
 275 280 285  
 Pro Tyr Ser Asp Val Asn Ile Gly Thr Gly Val Ala His Pro Pro Arg  
 290 295 300  
 Trp Thr Ser Asp Ser Thr Val Ala Glu Val Thr Ser Ile Gln Leu Glu  
 305 310 315 320  
 Phe Arg Glu Leu Ser Arg Leu Thr Gly Asp Lys Lys Phe Gln Glu Ala  
 325 330 335  
 Val Glu Lys Val Thr Gln His Ile His Gly Leu Ser Gly Lys Lys Asp  
 340 345 350  
 Gly Leu Val Pro Met Phe Ile Asn Thr His Ser Gly Leu Phe Thr His  
 355 360 365  
 Leu Gly Val Phe Thr Leu Gly Ala Arg Ala Asp Ser Tyr Tyr Glu Tyr  
 370 375 380  
 Leu Leu Lys Gln Trp Ile Gln Gly Gly Lys Gln Glu Thr Gln Leu Leu  
 385 390 395 400  
 Glu Asp Tyr Val Glu Ala Ile Glu Gly Val Arg Thr His Leu Leu Arg  
 405 410 415  
 His Ser Glu Pro Ser Lys Leu Thr Phe Val Gly Glu Leu Ala His Gly  
 420 425 430  
 Arg Phe Ser Ala Lys Met Asp His Leu Val Cys Phe Leu Pro Gly Thr  
 435 440 445  
 Leu Ala Leu Gly Val Tyr His Gly Leu Pro Ala Ser His Met Glu Leu  
 450 455 460  
 Ala Gln Glu Leu Met Glu Thr Cys Tyr Gln Met Asn Arg Gln Met Glu  
 465 470 475 480











Arg Leu Asp Ala Lys Lys Phe Val Thr Glu Leu Arg Arg Pro Val Ala  
 35 40 45

Val Arg Ala Lys Asp Ile Gly Ile Trp Tyr Asn Ile Leu Arg Gly Ile  
 50 55 60

Gly Lys Leu Ala Val Ile Ile Asn Ala Phe Val Ile Ser Phe Thr Ser  
 65 70 75 80

Asp Phe Ile Pro Arg Leu Val Tyr Leu Tyr Met Tyr Ser Lys Asn Gly  
 85 90 95

Thr Met His Gly Phe Val Asn His Thr Leu Ser Ser Phe Asn Val Ser  
 100 105 110

Asp Phe Gln Asn Gly Thr Ala Pro Asn Asp Pro Leu Asp Leu Gly Tyr  
 115 120 125

Glu Val Gln Ile Cys Arg Tyr Lys Asp Tyr Arg Glu Pro Pro Trp Ser  
 130 135 140

Glu Asn Lys Tyr Asp Ile Ser Lys Asp Phe Trp Ala Val Leu Ala Ala  
 145 150 155 160

Arg Leu Ala Phe Val Ile Val Phe Gln Asn Leu Val Met Phe Met Ser  
 165 170 175

Asp Phe Val Asp Trp Val Ile Pro Asp Ile Pro Lys Asp Ile Ser Gln  
 180 185 190

Gln Ile His Lys Glu Lys Val Leu Met Val Glu Leu Phe Met Arg Glu  
 195 200 205

Glu Gln Asp Lys Gln Gln Leu Leu Glu Thr Trp Met Glu Lys Glu Arg  
 210 215 220

Gln Lys Asp Glu Pro Pro Cys Asn His His Asn Thr Lys Ala Cys Pro  
 225 230 235 240

Asp Ser Leu Gly Ser Pro Ala Pro Ser His Ala Tyr His Gly Gly Val  
 245 250 255

Leu

<210> 2112  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 2112  
 Met Thr His Gly Cys Leu Ser Leu Ala Ser Met Ala Ala Gly Leu Gly  
 1 5 10 15

Ser Val Ser Leu Phe Leu Phe Val Gln Gln Trp Thr Pro Thr Thr Ala  
 20 25 30

Ser Thr Gly Glu Thr Pro Ser Ser Trp Gln Lys Thr Thr Ser Cys Val  
 35 40 45

Arg Arg  
 50

<210> 2113  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 2113  
 Met Thr His Gly Cys Leu Ser Leu Ala Ser Met Ala Ala Gly Leu Gly  
 1 5 10 15

Ser Val Ser Leu Phe Leu Phe Val Gln Gln Trp Thr Pro Thr Thr Ala  
 20 25 30

Ser Thr Gly Glu Thr Pro Ser Ser Trp Gln Lys Thr Thr Ser Cys Val  
 35 40 45

Arg Arg  
 50

<210> 2114  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 2114  
 Met Val Leu Leu Leu Leu Leu Leu Gln Lys Ile Pro Gly Thr Pro  
 1 5 10 15

Leu Phe Gln Pro Gly Phe Leu Gly Trp Ala Gln Glu Ser Cys Gln Ile  
 20 25 30

Gln Ser Tyr Val Gly Ser Lys Leu Pro Leu Cys Cys Phe Cys Gln Ala  
 35 40 45

Arg Cys Gly His Ser Lys Phe Ile Cys Val Asn Lys Arg Lys Glu Glu  
 50 55 60

Pro Ser Gly Cys Asn Arg Thr Asp Ser Ser  
 65 70

<210> 2115  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 2115  
 Met Trp Pro Trp Trp Leu Met Val Glu Arg Thr Val Val Leu Leu Leu  
 1 5 10 15



<210> 2117  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 2117  
 Met Trp Pro Arg Met Leu Ala Phe Ser Thr Trp Leu Glu Trp Leu Leu  
 1 5 10 15  
 Phe Ser Pro Leu Pro Gln Ser Val Gly Cys Pro Gly Pro Leu Glu Phe  
 20 25 30  
 Tyr Cys Val Gln Asp Arg Arg Pro Ser Leu Pro Asp Gly Ala Asp  
 35 40 45  
 His Phe Ser Ser Pro Thr Arg Ile Thr Ser Ser Ser Ile Ser Pro Ala  
 50 55 60  
 Leu Ser Leu Gln Ala Pro Glu Ala Gly Gly Phe Leu Ser Ile Pro Gly  
 65 70 75 80

<210> 2118  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 2118  
 Met His Asp Val Leu Phe Phe Leu Ser Phe Ser Leu Val Ala Cys Val  
 1 5 10 15  
 Lys Ala Gly Met Leu  
 20

<210> 2119  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<400> 2119  
 Met Asp Phe Ile Gln His Leu Gly Val Cys Cys Leu Val Ala Leu Ile  
 1 5 10 15  
 Ser Val Gly Leu Leu Ser Val Ala Ala Cys Trp Phe Leu Pro Ser Ile  
 20 25 30  
 Ile Ala Ala Ala Ala Ser Trp Ile Ile Thr Cys Val Leu Leu Cys Cys  
 35 40 45  
 Ser Lys His Ala Arg Cys Phe Ile Leu Leu Val Phe Leu Ser Cys Gly  
 50 55 60  
 Leu Arg Glu Gly Arg Asn Ala Leu Ile Ala Ala Gly Thr Gly Ile Val



[illegible]

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<210> 2121
<211> 257
<212> PRT
<213> Homo sapiens .
```

Met Asp Phe Ile Gln His Leu Gly Val Cys Cys Leu Val Ala Leu Ile  
1 5 10 15

Ile Ala Ala Ala Ala Ser Trp Ile Ile Thr Cys Val Leu Leu Cys Cys  
35 40 45

Ser Lys His Ala Arg Cys Phe Ile Leu Leu Val Phe Leu Ser Cys Gly  
 50 55 60  
 Leu Arg Glu Gly Arg Asn Ala Leu Ile Ala Ala Gly Thr Gly Ile Val  
 65 70 75 80  
 Ile Leu Gly His Val Glu Asn Ile Phe His Asn Phe Lys Gly Leu Leu  
 85 90 95  
 Asp Gly Met Thr Cys Asn Leu Arg Ala Lys Ser Phe Ser Ile His Phe  
 100 105 110  
 Pro Leu Leu Lys Lys Tyr Ile Glu Ala Ile Gln Trp Ile Tyr Gly Leu  
 115 120 125  
 Ala Thr Pro Leu Ser Val Phe Asp Asp Leu Val Ser Trp Asn Gln Thr  
 130 135 140  
 Leu Ala Val Ser Leu Phe Ser Pro Ser His Val Leu Glu Ala Gln Leu  
 145 150 155 160  
 Asn Asp Ser Lys Gly Glu Val Leu Ser Val Leu Tyr Gln Met Ala Thr  
 165 170 175  
 Thr Thr Glu Val Leu Ser Ser Leu Gly Gln Lys Leu Leu Ala Phe Ala  
 180 185 190  
 Gly Leu Ser Leu Val Leu Leu Gly Thr Gly Leu Phe Met Lys Arg Phe  
 195 200 205  
 Leu Gly Pro Cys Gly Trp Lys Tyr Glu Asn Ile Tyr Ile Thr Arg Gln  
 210 215 220  
 Phe Val Gln Phe Asp Glu Arg Glu Arg His Gln Gln Arg Pro Cys Val  
 225 230 235 240  
 Leu Pro Leu Asn Lys Glu Glu Arg Arg Lys Phe Ile Ser Gly Phe Gln  
 245 250 255

Ser

<210> 2122

<211> 352

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (284)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2122

Met Asp Phe Ile Gln His Leu Gly Val Cys Cys Leu Val Ala Leu Ile  
 1 5 10 15

Ser Val Gly Leu Leu Ser Val Ala Ala Cys Trp Phe Leu Pro Ser Ile  
 20 25 30

1395

0033245-04301

Ile Ala Ala Ala Ala Ser Trp Ile Ile Thr Cys Val Leu Leu Cys Cys  
35 40 45

Ser Lys His Ala Arg Cys Phe Ile Leu Leu Val Phe Leu Ser Cys Gly  
50 55 60

Leu Arg Glu Gly Arg Asn Ala Leu Ile Ala Ala Gly Thr Gly Ile Val  
65 70 75 80

Ile Leu Gly His Val Glu Asn Ile Phe His Asn Phe Lys Gly Leu Leu  
85 90 95

Asp Gly Met Thr Cys Asn Leu Arg Ala Lys Ser Phe Ser Ile His Phe  
100 105 110

Pro Leu Leu Lys Lys Tyr Ile Glu Ala Ile Gln Trp Ile Tyr Gly Leu  
115 120 125

Ala Thr Pro Leu Ser Val Phe Asp Asp Leu Val Ser Trp Asn Gln Thr  
130 135 140

Leu Ala Val Ser Leu Phe Ser Pro Ser His Val Leu Glu Ala Gln Leu  
145 150 155 160

Asn Asp Ser Lys Gly Glu Val Leu Ser Val Leu Tyr Gln Met Ala Thr  
165 170 175

Thr Thr Glu Val Leu Ser Ser Leu Gly Gln Lys Leu Leu Ala Phe Ala  
180 185 190

Gly Leu Ser Leu Val Leu Leu Gly Thr Gly Leu Phe Met Lys Arg Phe  
195 200 205

Leu Gly Pro Cys Gly Trp Lys Tyr Glu Asn Ile Tyr Ile Thr Arg Gln  
210 215 220

Phe Val Gln Phe Asp Glu Arg Glu Arg His Gln Gln Arg Pro Cys Val  
225 230 235 240

Leu Pro Leu Asn Lys Glu Glu Arg Arg Lys Tyr Val Ile Ile Pro Thr  
245 250 255

Phe Trp Pro Thr Pro Lys Glu Arg Lys Asn Leu Gly Leu Phe Phe Leu  
260 265 270

Pro Ile Leu Ile His Leu Cys Ile Trp Val Leu Xaa Ala Ala Val Asp  
275 280 285

Tyr Leu Leu Tyr Arg Leu Ile Phe Ser Val Ser Lys Gln Phe Gln Ser  
290 295 300

Leu Pro Gly Phe Glu Val His Leu Lys Leu His Gly Glu Lys Gln Gly  
305 310 315 320

Thr Gln Asp Ile Ile His Asp Ser Ser Phe Asn Ile Ser Val Phe Glu  
325 330 335

Pro Asn Cys Ile Pro Lys Pro Trp Gln Ala Leu Lys Leu Leu Ala His  
340 345 350



Figure 1 consists of 12 subplots, labeled (a) through (l), each representing a different fish species. Each subplot is a bar chart showing the percentage of total catch for that species across the years 1960 to 1990. The y-axis for all subplots is 'Percentage of total catch' with a scale from 0 to 100. The x-axis for all subplots is 'Year' with labels for 1960, 1970, 1980, and 1990. The species and their corresponding data series are: (a) Atlantic croaker, (b) Atlantic menhaden, (c) Atlantic herring, (d) Atlantic bluefish, (e) Atlantic silverside, (f) Atlantic tomcod, (g) Atlantic sand lance, (h) Atlantic mummichog, (i) Atlantic killifish, (j) Atlantic darter, (k) Atlantic rockfish, and (l) Atlantic sea herring. The charts illustrate the relative abundance of each species over the three-decade period.

Met Val Ser Cys Ser Ile Leu Ala Leu Thr His Leu Leu Phe Glu Phe  
1 5 10 15

Cys' Leu Leu Leu Ala Ser Arg Thr Arg Asp Val Val Lys Ser Ala Leu  
35 40 45

Lys His Val Gln Leu Val Met Glu Ala Ile Gly Lys Leu Ser Asp Asp  
65 70 75 80

Ile Arg Lys Phe Gly Phe Glu Leu Val Lys Arg Leu Leu Pro Glu Glu  
100 105 110

Arg His Arg Ala Leu Ser Gln Ala Ala Val Glu Glu Glu Glu Glu  
130 135 140

Ile Leu Ala Asp Ser Glu Asp Glu Glu Asp Asn Glu Glu Glu Glu Arg  
165                170                175

Trp Leu Lys Glu Gly Gly Gly Asp Glu Pro Leu Asn Phe Leu Asp Pro  
195 200 205

Glu Glu Gly Pro Gln Leu Gln Gly Glu Arg Arg Trp Pro Ala Asp His  
225 230 235 240

Lys Gly Gly Gly Arg Arg Gln Gln Asp Gly Gly Arg Gly Arg Cys Gln  
 ~ 245 250 255

Figure 1 consists of 12 subplots (a-l) showing the time course of various physiological variables during a 10-minute period. The variables are: (a) HR (b/min), (b) SV (l/min), (c) CO (l/min), (d) MAP (mmHg), (e) PVR (mmHg), (f) SVR (mmHg), (g) PPA (mmHg), (h) PVP (mmHg), (i) PVP/PPA, (j) PVP/PPA, (k) PVP/PPA, and (l) PVP/PPA. Each graph shows a baseline period followed by a 10-minute intervention period. The y-axis for all graphs ranges from 0 to 100. The x-axis for all graphs ranges from 0 to 10 minutes. The graphs show that HR, SV, CO, MAP, PVR, SVR, PPA, and PVP all increase during the intervention period, while PVP/PPA remains relatively stable.

<211> 42

<213> Homo sapiens

Met Leu Trp Leu Gly Thr Ser Leu Ile Phe Ser Ser Phe Ser Ala Ser  
1 5 10 15

Phe Asp Gly Val Pro Phe Leu Ser Ser Trp Leu Phe Trp Ser Ser Gly  
20 25 30

Ser Ser Pro Asn Ser Leu Ile Pro Pro Phe  
35 40

<211> 45

<213> Homo sapiens

Met Tyr Pro Pro Val Ala Pro Ser Phe Trp Gly Cys Val Cys Phe Phe  
1 5 10 15

Trp Ala Val Pro Leu Val Cys Cys Arg Asp Ser Trp Lys Gly Leu Ser  
20                 25                 30

Leu Phe Val Gly Ser Gly Gly Leu Gly Leu Val Glu His  
35 40 45

<211> 54

<213> Homo sapiens

Met Trp Pro Phe Leu His Leu Leu Asn Met Pro Phe Thr Leu Thr Gln  
1 5 10 15

Val Val Ala Ser Pro Ser Ser Cys Ser Asn Trp Lys Pro Gln His Pro  
20 25 30

Glu Met Pro Pro Pro Gln Ile His Cys Thr His Val Cys Leu Cys Met  
35 40 45

Arg Val Cys Ala Arg Val  
50

1398

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2127

Met	Leu	Met	Leu	Leu	Thr	Leu	Leu	Val	Leu	Gly	Met	Val	Trp	Val	Ala
1				5						10				15	
Ser	Ala	Ile	Val	Asp	Lys	Asn	Lys	Ala	Asn	Arg	Glu	Ser	Leu	Tyr	Asp
			20					25					30		
Phe	Trp	Glu	Tyr	Tyr	Leu	Pro	Tyr	Leu	Tyr	Ser	Cys	Ile	Ser	Phe	Leu
		35					40					45			
Gly	Val	Leu	Leu	Leu	Leu	Gly	Glu	Cys	Thr	Gly	Ser	Gly	Arg	Glu	Trp
	50					55					60				
Ala	Gly	Ser	Leu	Asp	Gln	Ser	Asn	Gln	Ala	Arg	Arg	Lys	Gly	Asn	Gly
65					70					75				80	
Gly	His	Val	Arg	Glu	Gly	Val	Glu	Ser	Arg	Val	Trp	Gln	Val	Thr	Gly
			85						90					95	
Ser	Cys	Pro	Tyr	Ser	Val	Tyr	Ser	Thr	Gly	Ser	Arg	Pro	His	Val	Leu
			100					105					110		
Arg	His	Trp	Glu	Ala	Ala	Ser	Gln	Ala	Pro	Ala	Ala	Gly	Arg	Pro	Gly
		115					120					125			
Gly	Ala	Ala	Val	Leu	Leu	Ser	Leu								
	130					135									

<210> 2128  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 2128

Met	His	Trp	Thr	Phe	Ser	Ser	Ser	Leu	Gly	Cys	Leu	Tyr	His	Phe	Ser
1				5					10					15	
Leu	Ser	Phe	Ser	Gly	Leu	His	Thr	Val	Leu	Lys	Ser	Ser	Pro	Ser	Ser
			20					25					30		
Arg	Phe	Leu	Leu	Pro	Cys	Ser	Ser	Gln	Val	Thr	Gln	Pro	Ser	Pro	Val
		35					40					45			
Gly	Gln	Pro	Arg	Leu	Val	Val	Gln	Leu	Pro	Pro	Val	Lys	Val	Ile	Gly
	50					55					60				
His	Arg	Thr	Gly	Gln	Cys	Arg	Gly	Pro	Gly						
65					70										

<210> 2129  
 <211> 253  
 <212> PRT

Figure 1 consists of ten panels (A-J) showing the growth of *E. coli* strains. Panel A is a bar chart of growth rate (h<sup>-1</sup>) for various strains. Panels B-J are line graphs showing growth rate (h<sup>-1</sup>) over time (h) for different media and conditions. The strains include wild-type (WT), 12S, and various mutants (12S-1, 12S-2, 12S-3, 12S-4, 12S-5, 12S-6, 12S-7, 12S-8, 12S-9, 12S-10, 12S-11, 12S-12, 12S-13, 12S-14, 12S-15, 12S-16, 12S-17, 12S-18, 12S-19, 12S-20, 12S-21, 12S-22, 12S-23, 12S-24, 12S-25, 12S-26, 12S-27, 12S-28, 12S-29, 12S-30, 12S-31, 12S-32, 12S-33, 12S-34, 12S-35, 12S-36, 12S-37, 12S-38, 12S-39, 12S-40, 12S-41, 12S-42, 12S-43, 12S-44, 12S-45, 12S-46, 12S-47, 12S-48, 12S-49, 12S-50, 12S-51, 12S-52, 12S-53, 12S-54, 12S-55, 12S-56, 12S-57, 12S-58, 12S-59, 12S-60, 12S-61, 12S-62, 12S-63, 12S-64, 12S-65, 12S-66, 12S-67, 12S-68, 12S-69, 12S-70, 12S-71, 12S-72, 12S-73, 12S-74, 12S-75, 12S-76, 12S-77, 12S-78, 12S-79, 12S-80, 12S-81, 12S-82, 12S-83, 12S-84, 12S-85, 12S-86, 12S-87, 12S-88, 12S-89, 12S-90, 12S-91, 12S-92, 12S-93, 12S-94, 12S-95, 12S-96, 12S-97, 12S-98, 12S-99, 12S-100).





09033245 041201  
102140" 542E860

<400> 2134

Met Phe Phe Pro Cys Leu Pro Thr Leu Xaa Leu Arg Ile Leu His Ser  
1 5 10 15  
Gly Trp Val Gly Leu Phe Leu Leu Ile Ser Ser Arg Ala Pro Ser Ser  
20 25 30  
Ser Leu Ala Trp Lys His Gly Pro Gly Xaa Leu Trp Trp Pro Arg Arg  
35 40 45  
Pro Leu Arg Ser Cys Thr Gly Leu Ala Ser Cys Gly  
50 55 60

<210> 2135

<211> 60

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2135

Met Phe Phe Pro Cys Leu Pro Thr Leu Xaa Leu Arg Ile Leu His Ser  
1 5 10 15  
Gly Trp Val Gly Leu Phe Leu Leu Ile Ser Ser Arg Ala Pro Ser Ser  
20 25 30  
Ser Leu Ala Trp Lys His Gly Pro Gly Glu Leu Trp Trp Pro Arg Xaa  
35 40 45  
Pro Leu Arg Ser Cys Thr Gly Leu Ala Ser Cys Gly  
50 55 60

<210> 2136

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2136

Met Ser Pro His Gln Pro Met Gln Val Ser Ser Ser Lys Thr Ile Leu  
1 5 10 15  
Trp Leu Val Leu Ser Cys Leu Cys Pro Ser Ser Pro His Pro Val Ile  
20 25 30  
Ser Gly Leu Pro Gln Trp Tyr Ile Gly Val Leu Ala Gly Ile Val Pro  
35 40 45

Val Ala Pro Ile Arg Pro Gly Asp Ser Gly Leu Asp Leu Gln Arg Glu  
50 55 60

Gly Pro Gln Pro Ile Leu Ser Gln Gly Leu Asn Arg Arg Thr  
65 70 75

<210> 2137  
<211> 78  
<212> PRT  
<213> Homo sapiens

<400> 2137  
Met Ser Pro His Gln Pro Met Gln Val Ser Ser Ser Lys Thr Ile Leu  
1 5 10 15

Trp Leu Val Leu Ser Cys Leu Cys Pro Ser Ser Pro His Pro Val Ile  
20 25 30

Ser Gly Leu Pro Gln Trp Tyr Ile Gly Val Leu Ala Gly Ile Val Pro  
35 40 45

Val Ala Pro Ile Arg Pro Gly Asp Ser Gly Leu Asp Leu Gln Arg Glu  
50 55 60

Gly Pro Gln Pro Ile Leu Ser Gln Gly Leu Asn Arg Arg Thr  
65 70 75

<210> 2138  
<211> 144  
<212> PRT  
<213> Homo sapiens

<400> 2138  
Met Ser Ala Val Ser Ala Pro Ala Leu Trp Gln Thr Trp Cys Val Pro  
1 5 10 15

Ala Ala Arg Ala Trp Thr Ser Ser Thr Leu Arg His Asp Ala Val Ala  
20 25 30

Arg Pro Asn Pro Ser Thr Ser Leu Thr Pro Gly Leu Leu Thr Ser Ser  
35 40 45

Asp Ser Pro Arg Trp Pro Gly Leu Gln Glu Ala Pro Gly Arg Pro Cys  
50 55 60

Ile Arg Leu Gly Arg Ser Glu Leu Cys Met Tyr Ile Tyr Thr Tyr Ile  
65 70 75 80

Asp Thr Phe Ile Ile Tyr Thr His Ser Leu Tyr Ile Tyr Ile His Cys  
85 90 95

Phe Leu Ala Pro Glu Leu Ile Trp Val Gln Ala His Phe Lys Thr Leu  
100 105 110

Pro Gly Gly Gly Cys Phe Phe Ser Gly Phe Leu Ala Arg Glu Glu Gly



125

1405

[illegible]

Leu Leu Ser Cys Pro Arg Thr Glu Gly Leu Pro Gly Leu Tyr Cys Pro  
 35 40 45

Gly Cys Ser Gln Cys Pro Gly Arg Gly Met Trp Pro Gly Asp Pro Gly  
 50 55 60

Pro Gly Ile Gln Gly Pro Gly Leu Asp Leu Arg Thr Gly Met Glu Ala  
 65 70 75 80

Thr Gly Ala Gln Gln Pro Thr Leu Ser Ser Pro His Cys Leu Leu Ser  
 85 90 95

Leu Pro Thr Leu Pro Ala Arg Ala Val Gln Leu Arg Trp Asp Leu Ser  
 100 105 110

Ile Ser Arg Ala Gly Gly Arg Val Ala Val Leu Gly Leu Cys Leu Glu  
 115 120 125

Pro Gly Gly Ser Leu Leu Leu Pro Pro Ser Ala Leu Pro Glu Thr Asp  
 130 135 140

Pro Cys Ala Ala Cys Pro Pro Cys Pro Phe Val Pro Met Ser Gly Gly  
 145 150 155 160

Gly Gly Arg Pro Thr Val Pro Glu Ala Gly His Gln Pro  
 165 170

<210> 2141  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 2141  
 Met Asn Arg Ser Thr Arg Ser Tyr Arg Cys Trp Ala Thr Trp Pro Arg  
 1 5 10 15

Leu Gly Trp Ala Leu Pro Cys Cys Met Asn Ser Leu Arg Lys Gly Arg  
 20 25 30

Lys Phe Ser Gln Ile Thr Thr Ser Leu Met Ala Ser Val Ser Ser Ala  
 35 40 45

Ser Met Val Ser Arg Arg Arg Arg Pro Leu Pro Lys His Pro Val Thr  
 50 55 60

Thr Thr Ser Thr Ala Thr Ala Leu Leu Gly Thr Ser Ser Thr Trp Ser  
 65 70 75 80

Lys Ser

<210> 2142  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

[illegible]

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<210> 2143
<211> 53
<212> PRT
<213> Homo sapiens
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Met Gly Gln Arg Gly Val Phe Leu Leu Ile Leu Asp Ala Phe Ser Val  
1 5 10 15

Pro Ser Thr Ala Ser Cys Leu Ile Thr Pro Leu Pro Pro Pro His Pro  
20 25 30

Gln Pro Ser Gln Phe Phe Leu Ala Ser Ala Leu Gln Pro Tyr Leu Gly  
35 40 45

Lys Glu Glu Trp Val  
50

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<211> 53
<212> PRT
<213> Homo sapiens
```

Met Gly Gln Arg Gly Val Phe Leu Leu Ile Leu Asp Ala Phe Ser Val  
1 5 10 15

Pro Ser Thr Ala Ser Cys Leu Ile Thr Pro Leu Pro Pro Pro His Pro  
20 25 30

Gln Pro Ser Gln Phe Phe Leu Ala Ser Ala Leu Gln Pro Tyr Leu Gly  
35 40 45

Lys Glu Glu Trp Val  
50

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<211> 97
<212> PRT
<213> Homo sapiens
```

<400> 2145  
 Met Leu Trp Lys Leu Lys Leu Ser Arg Cys Trp Leu Asp Leu Thr Leu  
 1 5 10 15  
 Leu Ile Phe Ser Gln Ile Ser His Met Asp Gln Ile Ile Phe Phe Phe  
 20 25 30  
 Val Val Tyr Pro Ile Leu Asn Asn Ile Phe Ser Leu Asn Tyr Cys Arg  
 35 40 45  
 Asp Phe Phe Cys Gly Gly Tyr Phe Leu Phe Cys Ser Lys Ile Ile Arg  
 50 55 60  
 Cys Lys Ala Ile Leu Cys Leu Thr Val Ala Leu Ser Lys Gln Leu Cys  
 65 70 75 80  
 Ser Gly Val Ala Phe Asp Val Leu Glu Phe Asp Tyr Met Gln Ser Cys  
 85 90 95  
 Ile

<210> 2146  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (63)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (99)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (122)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2146  
 Met Met Thr Met Thr Ser Asp Arg Trp Phe Ser Met Ala Trp Ala Ser  
 1 5 10 15  
 Cys Ser Leu Ser Arg Pro Pro Leu Thr Pro Ser Cys Ser Cys Gln Gln  
 20 25 30  
 Pro Ala Thr Val Ala Leu Leu Leu Gln Thr Ile Ser Val Cys Ser Ala  
 35 40 45  
 Gln Gln Ala Asp Pro Leu Ser Pro Pro Arg Ala Cys Arg Pro Xaa Arg  
 50 55 60  
 Gln Phe Pro Val Leu Gln Ser Ala Gly Pro Pro His Ser Pro His Val  
 65 70 75 80



Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile  
85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln  
100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly  
115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr  
130 135 140

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr  
145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val  
165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr  
180 185 190

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln  
195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly  
210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu  
225 230 235 240

Ile Phe Pro Ser Ala  
245

<210> 2149  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 2149  
Met Gly His Leu His Trp Gly Val Ser Gly Asn Phe Phe Phe Pro Arg  
1 5 10 15

Leu Ser Leu Phe Leu Leu Phe Ala Trp Leu Gln Ile Thr Gln Ala Asn  
20 25 30

Glu Pro Arg Leu Pro Gly Lys Tyr Ser Ile Lys Ala Ile Lys Ile Thr  
35 40 45

Ile Cys Ile Thr Phe Arg Thr Ser Ala  
50 55

<210> 2150  
<211> 152  
<212> PRT  
<213> Homo sapiens







50

55

60

Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala  
65 70 75 80

Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe  
85 90 95

Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val  
100 105 110

Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp  
115 120 125

Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys  
130 135 140

Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr  
145 150 155 160

Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro Glu Ala Glu Val  
165 170 175

Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr  
180 185 190

Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Ile Leu  
195 200 205

Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn  
210 215 220

Pro Val Leu Gln Gln Asp Ala His Ser Ser Val Thr Ile Thr Gly Gln  
225 230 235 240

Pro Met Thr Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser  
245 250 255

Val Cys Leu Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg  
260 265 270

Lys Ile Lys Gln Ser Cys Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln  
275 280 285

Asp Gly Glu Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His  
290 295 300

Ser Asp Ser Lys Glu Asp Asp Gly Gln Glu Ile Ala  
305 310 315

<210> 2153

<211> 831

<212> PRT

<213> Homo sapiens

<400> 2153

Met Lys Val His Met His Thr Lys Phe Cys Leu Ile Cys Leu Leu Thr  
1 5 10 15

1413

09033245-0412001

Phe Ile Phe His His Cys Asn His Cys His Glu Glu His Asp His Gly  
20 25 30

Pro Glu Ala Leu His Arg Gln His Arg Gly Met Thr Glu Leu Glu Pro  
35 40 45

Ser Lys Phe Ser Lys Gln Ala Ala Glu Asn Glu Lys Lys Tyr Tyr Ile  
50 55 60

Glu Lys Leu Phe Glu Arg Tyr Gly Glu Asn Gly Arg Leu Ser Phe Phe  
65 70 75 80

Gly Leu Glu Lys Leu Leu Thr Asn Leu Gly Leu Gly Glu Arg Lys Val  
85 90 95

Val Glu Ile Asn His Glu Asp Leu Gly His Asp His Val Ser His Leu  
100 105 110

Asp Ile Leu Ala Val Gln Glu Gly Lys His Phe His Ser His Asn His  
115 120 125

Gln His Ser His Asn His Leu Asn Ser Glu Asn Gln Thr Val Thr Ser  
130 135 140

Val Ser Thr Lys Arg Asn His Lys Cys Asp Pro Glu Lys Glu Thr Val  
145 150 155 160

Glu Val Ser Val Lys Ser Asp Asp Lys His Met His Asp His Asn His  
165 170 175

Arg Leu Arg His His His Arg Leu His His His Leu Asp His Asn Asn  
180 185 190

Thr His His Phe His Asn Asp Ser Ile Thr Pro Ser Glu Arg Gly Glu  
195 200 205

Pro Ser Asn Glu Pro Ser Thr Glu Thr Asn Lys Thr Gln Glu Gln Ser  
210 215 220

Asp Val Lys Leu Pro Lys Gly Lys Arg Lys Lys Lys Gly Arg Lys Ser  
225 230 235 240

Asn Glu Asn Ser Glu Val Ile Thr Pro Gly Phe Pro Pro Asn His Asp  
245 250 255

Gln Gly Glu Gln Tyr Glu His Asn Arg Val His Lys Pro Asp Arg Val  
260 265 270

His Asn Pro Gly His Ser His Val His Leu Pro Glu Arg Asn Gly His  
275 280 285

Asp Pro Gly Arg Gly His Gln Asp Leu Asp Pro Asp Asn Glu Gly Glu  
290 295 300

Leu Arg His Thr Arg Lys Arg Glu Ala Pro His Val Lys Asn Asn Ala  
305 310 315 320

Ile Ile Ser Leu Arg Lys Asp Leu Asn Glu Asp Asp His His His Glu  
325 330 335

Cys Leu Asn Val Thr Gln Leu Leu Lys Tyr Tyr Gly His Gly Ala Asn  
340 345 350

Ser Pro Ile Ser Thr Asp Leu Phe Thr Tyr Leu Cys Pro Ala Leu Leu  
355 360 365

Tyr Gln Ile Asp Ser Arg Leu Cys Ile Glu His Phe Asp Lys Leu Leu  
370 375 380

Val Glu Asp Ile Asn Lys Asp Lys Asn Leu Val Pro Glu Asp Glu Ala  
385 390 395 400

Asn Ile Gly Ala Ser Ala Trp Ile Cys Gly Ile Ile Ser Ile Thr Val  
405 410 415

Ile Ser Leu Leu Ser Leu Leu Gly Val Ile Leu Val Pro Ile Ile Asn  
420 425 430

Gln Gly Cys Phe Lys Phe Leu Leu Thr Phe Leu Val Ala Leu Ala Val  
435 440 445

Gly Thr Met Ser Gly Asp Ala Leu Leu His Leu Leu Pro His Ser Gln  
450 455 460

Gly Gly His Asp His Ser His Gln His Ala His Gly His Gly His Ser  
465 470 475 480

His Gly His Glu Ser Asn Lys Phe Leu Glu Glu Tyr Asp Ala Val Leu  
485 490 495

Lys Gly Leu Val Ala Leu Gly Gly Ile Tyr Leu Leu Phe Ile Ile Glu  
500 505 510

His Cys Ile Arg Met Phe Lys His Tyr Lys Gln Gln Arg Gly Lys Gln  
515 520 525

Lys Trp Phe Met Lys Gln Asn Thr Glu Glu Ser Thr Ile Gly Arg Lys  
530 535 540

Leu Ser Asp His Lys Leu Asn Asn Thr Pro Asp Ser Asp Trp Leu Gln  
545 550 555 560

Leu Lys Pro Leu Ala Gly Thr Asp Asp Ser Val Val Ser Glu Asp Arg  
565 570 575

Leu Asn Glu Thr Glu Leu Thr Asp Leu Glu Gly Gln Gln Glu Ser Pro  
580 585 590

Pro Lys Asn Tyr Leu Cys Ile Glu Glu Glu Lys Ile Ile Asp His Ser  
595 600 605

His Ser Asp Gly Leu His Thr Ile His Glu His Asp Leu His Ala Ala  
610 615 620

Ala His Asn His His Gly Glu Asn Lys Thr Val Leu Arg Lys His Asn  
625 630 635 640

His Gln Trp His His Lys His Ser His His Ser His Gly Pro Cys His  
645 650 655

Ser Gly Ser Asp Leu Lys Glu Thr Gly Ile Ala Asn Ile Ala Trp Met  
660 665 670

Val Ile Met Gly Asp Gly Ile His Asn Phe Ser Asp Gly Leu Ala Ile  
675 680 685

Gly Ala Ala Phe Ser Ala Gly Leu Thr Gly Gly Ile Ser Thr Ser Ile  
690 695 700

Ala Val Phe Cys His Glu Leu Pro His Glu Leu Gly Asp Phe Ala Val  
705 710 715 720

Leu Leu Lys Ala Gly Met Thr Val Lys Gln Ala Ile Val Tyr Asn Leu  
725 730 735

Leu Ser Ala Met Met Ala Tyr Ile Gly Met Leu Ile Gly Thr Ala Val  
740 745 750

Gly Gln Tyr Ala Asn Asn Ile Thr Leu Trp Ile Phe Ala Val Thr Ala  
755 760 765

Gly Met Phe Leu Tyr Val Ala Leu Val Asp Met Leu Pro Glu Met Leu  
770 775 780

His Gly Asp Gly Asp Asn Glu Glu His Gly Phe Cys Pro Val Gly Gln  
785 790 795 800

Phe Ile Leu Gln Asn Leu Gly Leu Leu Phe Gly Phe Ala Ile Met Leu  
805 810 815

Val Ile Ala Leu Tyr Glu Asp Lys Ile Val Phe Asp Ile Gln Phe  
820 825 830

<210> 2154  
<211> 480  
<212> PRT  
<213> Homo sapiens

<400> 2154  
Met Leu Phe Arg Asn Arg Phe Leu Leu Leu Leu Ala Leu Ala Ala Leu  
1 5 10 15

Leu Ala Phe Val Ser Leu Ser Leu Gln Phe Phe His Leu Ile Pro Val  
20 25 30

Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met  
35 40 45

Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala  
50 55 60

Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly  
65 70 75 80

His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg  
85 90 95





<400> 2156

Met Tyr Met Gln Asp Tyr Trp Arg Thr Trp Leu Lys Gly Leu Arg Gly  
1 5 10 15

Phe Phe Phe Val Gly Val Leu Phe Ser Ala Val Ser Ile Ala Ala Phe  
20 25 30

Cys Thr Phe Leu Val Leu Ala Ile Thr Arg His Gln Ser Leu Thr Asp  
35 40 45

Pro Thr Ser Tyr Tyr Leu Ser Ser Val Trp Ser Phe Ile Ser Phe Lys  
50 55 60

Trp Ala Phe Leu Leu Ser Leu Tyr Ala His Arg Tyr Arg Ala Asp Phe  
65 70 75 80

Ala Asp Ile Ser Ile Leu Ser Asp Phe  
85

<210> 2157

<211> 56

<212> PRT

<213> Homo sapiens

<400> 2157

Met Arg Gly His Ile Thr Thr Leu Leu Thr Thr Ser Phe Leu Val Phe  
1 5 10 15

Gly Leu His Ile Ile Phe Phe Leu Asn Ile Ser Cys Phe Asn Phe Arg  
20 25 30

Val Phe Ile Leu Phe Glu Thr Arg Pro Glu Asp Ser Arg Leu Tyr Arg  
35 40 45

Glu Arg Pro Val Leu Pro Arg Tyr  
50 55

<210> 2158

<211> 50

<212> PRT

<213> Homo sapiens

<400> 2158

Met Gln Val Lys Asn Ser Ile His Val Thr Phe Val Ala Arg Ile Leu  
1 5 10 15

Val Arg Val Leu Ile Cys Leu Ser Thr Ser Glu Ala Ile Leu Ala Arg  
20 25 30

Asn His Ile Tyr Val Val Ser Val Thr Asn Ala Ser Val Glu Val Gln  
35 40 45

Thr Ser  
50





35 40 45

Lys Lys Arg Lys Leu Ile Leu Pro Lys Arg Leu Lys Ser Ser Thr Ser  
50 55 60

Phe Ala Asn Ile Gln Glu Asn Ser Asn  
65 70

<210> 2162  
<211> 193  
<212> PRT  
<213> Homo sapiens

<400> 2162  
Met Glu Pro Gly Pro Thr Ala Ala Gln Arg Arg Cys Ser Leu Pro Pro  
1 5 10 15

Trp Leu Pro Leu Gly Leu Leu Leu Trp Ser Gly Leu Ala Leu Gly Ala  
20 25 30

Leu Pro Phe Gly Ser Ser Pro His Arg Val Phe His Asp Leu Leu Ser  
35 40 45

Glu Gln Gln Leu Leu Glu Val Glu Asp Leu Ser Leu Ser Leu Leu Gln  
50 55 60

Gly Gly Gly Leu Gly Pro Leu Ser Leu Pro Pro Asp Leu Pro Asp Leu  
65 70 75 80

Asp Pro Glu Cys Arg Glu Leu Leu Leu Asp Phe Ala Asn Ser Ser Ala  
85 90 95

Glu Leu Thr Gly Cys Leu Val Arg Ser Ala Arg Pro Val Arg Leu Cys  
100 105 110

Gln Thr Cys Tyr Pro Leu Phe Gln Gln Val Val Ser Lys Met Asp Asn  
115 120 125

Ile Ser Arg Ala Ala Gly Asn Thr Ser Glu Ser Gln Ser Cys Ala Arg  
130 135 140

Ser Leu Leu Met Ala Asp Arg Met Gln Ile Val Val Ile Leu Ser Glu  
145 150 155 160

Phe Phe Asn Thr Thr Trp Gln Glu Ala Asn Cys Ala Asn Cys Leu Thr  
165 170 175

Asn Asn Ser Glu Glu Leu Ser Asn Ser Thr Val Tyr Phe Leu Lys Ser  
180 185 190

Ile

<210> 2163  
<211> 134  
<212> PRT

[illegible]

Met Ala Pro Glu Val Met Glu Gln Val Arg Gly Tyr Asp Phe Lys Ala  
1 5 10 15

Asp Ile Trp Ser Phe Gly Ile Thr Ala Ile Glu Leu Ala Thr Gly Ala  
20 25 30

Ala Pro Tyr His Lys Tyr Pro Pro Met Lys Val Leu Met Leu Thr Leu  
35 40 45

Gln Asn Asp Pro Pro Ser Leu Glu Thr Gly Val Gln Asp Lys Glu Met  
50 55 60

Leu Lys Lys Tyr Gly Lys Ser Phe Arg Lys Met Ile Ser Leu Cys Leu  
65 70 75 80

Gln Lys Asp Pro Glu Lys Arg Pro Thr Ala Ala Glu Leu Leu Arg His  
85 90 95

Lys Phe Phe Gln Lys Ala Lys Asn Lys Glu Phe Leu Gln Glu Lys Thr  
100 105 110

Leu Gln Arg Ala Pro Thr Ile Ser Glu Arg Ala Lys Lys Val Arg Arg  
115 120 125

Val Pro Gly Ser Cys Pro  
130

<211> 334

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2164

Met Glu Pro Gly Pro Thr Ala Ala Gln Arg Arg Cys Ser Leu Pro Pro  
1 5 10 15

Trp Leu Pro Leu Gly Leu Leu Leu Trp Ser Gly Leu Ala Leu Gly Ala  
20 25 30

Leu Pro Phe Gly Ser Ser Pro His Arg Val Phe His Asp Leu Leu Ser  
35 40 45

Glu Gln Gln Leu Leu Glu Val Glu Asp Leu Ser Leu Ser Leu Leu Gln  
50 55 60

Gly Gly Gly Leu Gly Pro Leu Ser Leu Pro Pro Asp Leu Pro Asp Leu  
65 70 75 80

Asp Pro Glu Cys Arg Glu Leu Leu Leu Asp Phe Ala Asn Ser Ser Ala  
85 90 95

1422



Phe Lys Arg Leu Ile Trp Asn Lys Ser Ile Leu Ile Ile Thr Leu Thr  
 35 40 45

Pro

<210> 2166  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Met Ser Leu Ser Ile Leu Val Ala Leu Ser Leu Gln Ile Leu Phe Leu  
 1 5 10 15  
 Phe Thr Ile Leu Lys Cys Met Leu Ala Lys Trp Val Asp Phe Gln Ile  
 20 25 30  
 Lys Cys Ser Phe His Lys Ser Phe Val Met Val Phe Trp Ser Glu Met  
 35 40 45  
 His Phe His Phe Ser Phe Leu Phe Leu Leu Ser Ile Leu Ser Phe Phe  
 50 55 60  
 Pro Asn Lys Ile Tyr Pro Gly Asp Tyr Ile Cys  
 65 70 75

<210> 2167  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 2167  
 Met Leu Trp Ala Leu Asp Ser Leu Leu Phe Phe Ser His Ala Gln Leu  
 1 5 10 15  
 Val Pro Leu Gly Gly Gly Glu Glu Trp Gly Ser Pro Gly Leu Gly Leu  
 20 25 30  
 His Ser Ile Ile Pro Ser Gln Ala Ser Gln Gly Val Ser Ala Pro Ala  
 35 40 45  
 Gln Asp Leu Ala Gly Arg Ala Pro Tyr Arg Glu Ser Leu Gly Arg Leu  
 50 55 60  
 Ser Arg Leu Met Ala Gly Pro Ala Arg Gly Val Leu Arg Pro Ala Leu  
 65 70 75 80  
 Arg Thr Cys Pro Leu Phe  
 85

<210> 2168  
 <211> 152  
 <212> PRT



100	105	110
Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln Val Leu		
115	120	125
Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro Gln		
130	135	140
<210> 2170		
<211> 453		
<212> PRT		
<213> Homo sapiens		
<400> 2170		
Met Lys Leu Leu Val Ile Leu Ile Phe Ser Gly Leu Ile Thr Cys Cys		
1	5	10 15
Gly Gly Asn Ser Ser His Ser Leu Pro Ser Lys Leu Leu Leu Val Ser		
	20	25 30
Phe Asp Gly Phe Arg Ala Asp Tyr Leu Gln Asn Tyr Glu Phe Pro His		
	35	40 45
Leu Gln Asn Phe Ile Lys Glu Gly Val Leu Val Glu His Val Lys Asn		
	50	55 60
Val Phe Ile Thr Lys Thr Phe Pro Asn His Tyr Ser Ile Val Thr Gly		
	65	70 75 80
Leu Tyr Glu Glu Ser His Gly Ile Val Ala Asn Ser Met Tyr Asp Val		
	85	90 95
Ile Thr Lys Lys His Phe Ser Asp Phe Asp Asp Lys Asp Pro Phe Trp		
	100	105 110
Trp Asn Glu Ala Val Pro Ile Trp Val Thr Asn Gln Leu Gln Glu Asn		
	115	120 125
Arg Ser Ser Ala Ala Ala Met Trp Pro Gly Thr Asp Val Pro Ile His		
	130	135 140
Asn Thr Thr Pro Ser Tyr Phe Met Asn Tyr Ser Ser Ser Val Ser Phe		
	145	150 155 160
Glu Glu Arg Leu Asn Asn Ile Thr Met Trp Leu Met Asn Ser Asn Pro		
	165	170 175
Pro Val Thr Phe Ala Thr Leu Tyr Trp Glu Glu Pro Asp Ala Ser Gly		
	180	185 190
His Lys Tyr Gly Pro Glu Asp Lys Glu Asn Met Tyr Arg Val Leu Lys		
	195	200 205
Glu Val Asp Asp Leu Ile Gly Glu Leu Val His Lys Leu Lys Val Leu		
	210	215 220
Gly Leu Trp Glu Asn Leu Asn Val Ile Ile Thr Ser Asp His Gly Met		
	225	230 235 240



Cys 50	Asn	Val	Thr	Gly	Tyr	Glu 55	Gly	Pro	Ala	Gln	Gln 60	Asn	Phe	Glu	Trp
Phe 65	Leu	Tyr	Arg	Pro	Glu 70	Ala	Pro	Asp	Thr	Ala 75	Leu	Gly	Ile	Val	Ser 80
Thr	Lys	Asp	Thr	Gln 85	Phe	Ser	Tyr	Ala	Val 90	Phe	Lys	Ser	Arg	Val 95	Val
Ala	Gly	Glu	Val 100	Gln	Val	Gln	Arg	Leu 105	Gln	Gly	Asp	Ala	Val 110	Val	Leu
Lys	Ile	Ala 115	Arg	Leu	Gln	Ala	Gln	Asp 120	Ala	Gly	Ile	Tyr 125	Glu	Cys	His
Thr 130	Pro	Ser	Thr	Asp	Thr	Arg 135	Tyr	Leu	Gly	Ser 140	Tyr	Ser	Gly	Lys	Val
Glu 145	Leu	Arg	Val	Leu	Pro 150	Asp	Val	Leu	Gln	Val 155	Ser	Ala	Ala	Pro	Pro 160
Gly	Pro	Arg	Gly	Arg 165	Gln	Ala	Pro	Thr	Ser 170	Pro	Pro	Arg	Met	Thr 175	Val
His	Glu	Gly	Gln 180	Glu	Leu	Ala	Leu	Gly 185	Cys	Leu	Ala	Arg	Thr 190	Ser	Thr
Gln	Lys	His 195	Thr	His	Leu	Ala	Val 200	Ser	Phe	Gly	Arg	Ser 205	Val	Pro	Glu
Ala 210	Pro	Val	Gly	Arg	Ser	Thr 215	Leu	Gln	Glu	Val	Val 220	Gly	Ile	Arg	Ser
Asp 225	Leu	Ala	Val	Glu	Ala 230	Gly	Ala	Pro	Tyr	Ala 235	Glu	Arg	Leu	Ala	Ala 240
Gly	Glu	Leu	Arg	Leu 245	Gly	Lys	Glu	Gly	Thr 250	Asp	Arg	Tyr	Arg	Met 255	Val
Val	Gly	Gly	Ala 260	Gln	Ala	Gly	Asp 265	Ala	Gly	Thr	Tyr	His	Cys 270	Thr	Ala
Ala	Glu	Trp 275	Ile	Gln	Asp	Pro	Asp 280	Gly	Ser	Trp	Ala	Gln 285	Ile	Ala	

<210> 2172

<212> PRT

Met Gly Ala Leu Arg Pro Thr Leu Leu Pro Pro Ser Leu Pro Leu Leu  
1 5 10 15



35					40					45					
Cys	Asn	Val	Thr	Gly	Tyr	Glu	Gly	Pro	Ala	Gln	Gln	Asn	Phe	Glu	Trp
50						55					60				
Phe	Leu	Tyr	Arg	Pro	Glu	Ala	Pro	Asp	Thr	Ala	Leu	Gly	Ile	Val	Ser
65					70					75					80
Thr	Lys	Asp	Thr	Gln	Phe	Ser	Tyr	Ala	Val	Phe	Lys	Ser	Arg	Val	Val
				85					90					95	
Ala	Gly	Glu	Val	Gln	Val	Gln	Arg	Leu	Gln	Gly	Asp	Ala	Val	Val	Leu
			100					105					110		
Lys	Ile	Ala	Arg	Leu	Gln	Ala	Gln	Asp	Ala	Gly	Ile	Tyr	Glu	Cys	His
		115					120					125			
Thr	Pro	Ser	Thr	Asp	Thr	Arg	Tyr	Leu	Gly	Ser	Tyr	Ser	Gly	Lys	Val
	130					135					140				
Glu	Leu	Arg	Val	Leu	Pro	Asp	Val	Leu	Gln	Val	Ser	Ala	Ala	Pro	Pro
145					150					155					160
Gly	Pro	Arg	Gly	Arg	Gln	Ala	Pro	Thr	Ser	Pro	Pro	Arg	Met	Thr	Val
				165					170					175	
His	Glu	Gly	Gln	Glu	Leu	Ala	Leu	Gly	Cys	Leu	Ala	Arg	Thr	Ser	Thr
			180					185					190		
Gln	Lys	His	Thr	His	Leu	Ala	Val	Ser	Phe	Gly	Arg	Ser	Val	Pro	Glu
		195					200					205			
Ala	Pro	Val	Gly	Arg	Ser	Thr	Leu	Gln	Glu	Val	Val	Gly	Ile	Arg	Ser
	210					215					220				
Asp	Leu	Ala	Val	Glu	Ala	Gly	Ala	Pro	Tyr	Ala	Glu	Arg	Leu	Ala	Ala
225					230					235					240
Gly	Glu	Leu	Arg	Leu	Gly	Lys	Glu	Gly	Thr	Asp	Arg	Tyr	Arg	Met	Val
				245					250					255	
Val	Gly	Gly	Ala	Gln	Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala
			260					265					270		
Ala	Glu	Trp	Ile	Gln	Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu
	275						280					285			
Lys	Arg	Ala	Val	Leu	Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln
	290					295					300				
Leu	Ala	Val	Thr	Val	Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu
305					310					315					320
Pro	Leu	Glu	Leu	Leu	Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly
				325					330					335	
Arg	His	Ala	Ala	Tyr	Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala
			340					345					350		
Pro	Gly	Pro	Gly	Arg	Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly

355	360	365																	
Ser	Leu	Gly	Pro	Gly	Tyr	Glu	Gly	Arg	His	Ile	Ala	Met	Glu	Lys	Val				
370						375					380								
Ala	Ser	Arg	Thr	Tyr	Arg	Leu	Arg	Leu	Glu	Ala	Ala	Arg	Pro	Gly	Asp				
385					390					395					400				
Ala	Gly	Thr	Tyr	Arg	Cys	Leu	Ala	Lys	Ala	Tyr	Val	Arg	Gly	Ser	Gly				
				405					410					415					
Thr	Arg	Leu	Arg	Glu	Ala	Ala	Ser	Ala	Arg	Ser	Arg	Pro	Leu	Pro	Val				
			420					425					430						
His	Val	Arg	Glu	Glu	Gly	Val	Val	Leu	Glu	Ala	Val	Ala	Trp	Leu	Ala				
		435					440					445							
Gly	Gly	Thr	Val	Tyr	Arg	Gly	Glu	Thr	Ala	Ser	Leu	Leu	Cys	Asn	Ile				
450						455					460								
Ser	Val	Arg	Gly	Gly	Pro	Pro	Gly	Leu	Arg	Leu	Ala	Ala	Ser	Trp	Trp				
465					470					475					480				
Val	Glu	Arg	Pro	Glu	Asp	Gly	Glu	Leu	Ser	Ser	Val	Pro	Ala	Gln	Leu				
				485					490					495					
Val	Gly	Gly	Val	Gly	Gln	Asp	Gly	Val	Ala	Glu	Leu	Gly	Val	Arg	Pro				
			500					505					510						
Gly	Gly	Gly	Pro	Val	Ser	Val	Glu	Leu	Val	Gly	Pro	Arg	Ser	His	Arg				
			515				520					525							
Leu	Arg	Leu	His	Ser	Leu	Gly	Pro	Glu	Asp	Glu	Gly	Val	Tyr	His	Cys				
	530					535					540								
Ala	Pro	Ser	Ala	Trp	Val	Gln	His	Ala	Asp	Tyr	Ser	Trp	Tyr	Gln	Ala				
545					550					555					560				
Gly	Ser	Ala	Arg	Ser	Gly	Pro	Val	Thr	Val	Tyr	Pro	Tyr	Met	His	Ala				
				565					570					575					
Leu	Asp	Thr	Leu	Phe	Val	Pro	Leu	Leu	Val	Gly	Thr	Gly	Val	Ala	Leu				
			580					585					590						
Val	Thr	Gly	Ala	Thr	Val	Leu	Gly	Thr	Ile	Thr	Cys	Cys	Phe	Met	Lys				
		595					600					605							
Arg	Leu	Arg																	

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<210> 2173
<211> 122
<212> PRT
<213> Homo sapiens
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1430



130		135		140
Glu Leu Arg Val Leu Pro Asp Val Leu Gln Val Ser Ala Ala Pro Pro				
145		150		155
Gly Pro Arg Gly Arg Gln Ala Pro Thr Ser Pro Pro Arg Met Thr Val				
	165		170	175
His Glu Gly Gln Glu Leu Ala Leu Gly Cys Leu Ala Arg Thr Ser Thr				
	180		185	190
Gln Lys His Thr His Leu Ala Val Ser Phe Gly Arg Ser Val Pro Glu				
	195	200		205
Ala Pro Val Gly Arg Ser Thr Leu Gln Glu Val Val Gly Ile Arg Ser				
	210	215		220
Asp Leu Ala Val Glu Ala Gly Ala Pro Tyr Ala Glu Arg Leu Ala Ala				
	225	230		235
Gly Glu Leu Arg Leu Gly Lys Glu Gly Thr Asp Arg Tyr Arg Met Val				
	245		250	255
Val Gly Gly Ala Gln Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala				
	260		265	270
Ala Glu Trp Ile Gln Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala Glu				
	275	280		285
Lys Arg Ala Val Leu Ala His Val Asp Val Gln Thr Leu Ser Ser Gln				
	290	295		300
Leu Ala Val Thr Val Gly Pro Gly Glu Arg Arg Ile Gly Pro Gly Glu				
	305	310		315
Pro Leu Glu Leu Leu Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly				
	325		330	335
Arg His Ala Ala Tyr Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala				
	340		345	350
Pro Gly Pro Gly Arg Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly				
	355		360	365
Ser Leu Gly Pro Gly Tyr Glu Gly Arg His Ile Ala Met Glu Lys Val				
	370	375		380
Ala Ser Arg Thr Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp				
	385	390		395
Ala Gly Thr Tyr Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly				
	405		410	415
Thr Arg Leu Arg Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val				
	420		425	430
His Val Arg Glu Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala				
	435	440		445
Gly Gly Thr Val Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile				





[illegible]

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<400> 2177
Gly Thr Arg Thr Glu Arg Asp Glu Leu Leu Lys Asp Leu Gln Gln Ser
  1          5          10          15
Ile Ala Arg Glu Pro Ser Ala Pro Ser Ile Pro Thr Pro Ala Tyr Gln
          20          25          30
Ser Leu Pro Ala Gly Gly His Ala Pro Thr Pro Pro Thr Pro Ala Pro
          35          40          45
Arg Thr Met Pro Pro Thr Lys Pro Gln Pro Pro Ala Arg Pro Pro Pro
          50          55          60
Pro Val Leu Pro Ala Asn Arg Ala Pro Ser Ala Thr Ala Pro Ser Pro
          65          70          75          80
Val Gly Ala Gly Thr Ala Ala Pro Ala Pro Ser Gln Thr Pro Gly Ser
          85          90          95
Ala Pro Pro Pro Gln Ala Gln Gly Pro Pro Tyr Pro Thr Tyr Pro Gly
          100          105          110
Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met Gly Tyr Asn Pro Tyr
          115          120          125
Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro Val Tyr His Gln Ser
          130          135          140
Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln Pro Ser Tyr Pro Phe
          145          150          155          160
Pro Gln Pro Pro Gln Gln Ser Tyr Tyr Pro Gln Gln
          165          170

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1435

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<400> 2178
Met His Gln Leu Leu Gln Leu Gln Arg Gln Glu Pro Cys Arg Leu Leu
  1              5              10              15

Ser Pro Ser Pro Gln Pro Gly Leu His His Leu Cys Phe Gln Gln Ile
      20              25              30

Glu Leu Leu Leu Leu Leu Leu His Leu Gln Trp Gly Leu Gly Leu Leu
      35              40              45

Arg Gln Leu His His Lys Arg Leu Ala Gln Leu Leu Leu His Arg Arg
      50              55              60

Arg Asp His Pro Ile Pro Pro Ile Gln Asp Ile Leu Gly Ile Ala Lys
      65              70              75              80

Cys Pro Cys Pro Trp Ala Ile Ile Leu Met Arg Met Ala Ser Ile Ile
      85              90              95

Cys His Ile His Gln Cys Ile Thr Arg Val Leu Asp Arg Leu Xaa Thr
      100              105              110

Arg Asp Pro Ser Ser Leu His Thr Pro Ser Leu Ser Pro His Ser Ser
      115              120              125

Leu Thr Ile His Ser Ser Asn Met Ser Ala Gln Gln Leu Ser
      130              135              140

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<220>  
<221> SITE  
<222> (194)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (550)
<223> Xaa equals any of the naturally occurring L-amino acids
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1436



0903245 041201

1	5	10	15
Leu Ala Lys Pro Leu Val Lys Phe Ile Gln Gln Thr Tyr Pro Ser Gly	20	25	30
Gly Glu Glu Gln Ala Gln Tyr Cys Arg Ala Ala Glu Glu Leu Ser Lys	35	40	45
Leu Arg Arg Ala Ala Val Gly Arg Pro Leu Asp Lys His Glu Gly Ala	50	55	60
Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro	65	70	75
Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys	85	90	95
Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala	100	105	110
Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala	115	120	125
Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu	130	135	140
Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe	145	150	155
Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr	165	170	175
Val Asp Ile Ser Pro Asp Thr Val Gly Thr Leu Ser Leu Ile Met Leu	180	185	190
Ala Xaa Ala Gln Glu Val Phe Phe Leu Lys Ala Thr Arg Asp Lys Met	195	200	205
Lys Asp Ala Ile Ile Ala Lys Leu Ala Asn Gln Ala Ala Asp Tyr Phe	210	215	220
Gly Asp Ala Phe Lys Gln Cys Gln Tyr Lys Asp Thr Leu Pro Lys Glu	225	230	235
Val Phe Pro Val Leu Ala Ala Lys His Cys Ile Met Gln Ala Asn Ala	245	250	255
Glu Tyr His Gln Ser Ile Leu Ala Lys Gln Gln Lys Lys Phe Gly Glu	260	265	270
Glu Ile Ala Arg Leu Gln His Ala Ala Glu Leu Ile Lys Thr Val Ala	275	280	285
Ser Arg Tyr Asp Glu Tyr Val Asn Val Lys Asp Phe Ser Asp Lys Ile	290	295	300
Asn Arg Ala Leu Xaa Ala Ala Lys Lys Asp Asn Asp Phe Ile Tyr His	305	310	315
Asp Arg Val Pro Asp Leu Lys Asp Leu Asp Pro Ile Gly Lys Ala Thr			

325	330	335
Leu Val Lys Ser Thr Pro Val Asn Val Pro Ile Ser Gln Lys Phe Thr 340 345 350		
Asp Leu Phe Glu Lys Met Val Pro Val Ser Val Gln Gln Ser Leu Ala 355 360 365		
Ala Tyr Asn Gln Arg Lys Ala Asp Leu Val Asn Arg Ser Ile Ala Gln 370 375 380		
Met Arg Glu Ala Thr Thr Leu Ala Asn Gly Val Leu Ala Ser Leu Asn 385 390 395 400		
Leu Pro Ala Ala Ile Glu Asp Val Ser Gly Asp Thr Val Pro Gln Ser 405 410 415		
Ile Leu Thr Lys Ser Arg Ser Val Ile Glu Gln Gly Gly Ile Gln Thr 420 425 430		
Val Asp Gln Leu Ile Lys Glu Leu Pro Glu Leu Leu Gln Arg Asn Arg 435 440 445		
Glu Ile Leu Asp Glu Ser Leu Arg Leu Leu Asp Glu Glu Ala Thr 450 455 460		
Asp Asn Asp Leu Arg Ala Lys Phe Lys Glu Arg Trp Gln Arg Thr Pro 465 470 475 480		
Ser Asn Glu Leu Tyr Lys Pro Leu Arg Ala Glu Gly Thr Asn Phe Arg 485 490 495		
Thr Val Leu Asp Lys Ala Val Gln Ala Asp Gly Gln Val Lys Glu Cys 500 505 510		
Tyr Gln Ser His Arg Asp Thr Ile Val Leu Leu Cys Lys Pro Glu Pro 515 520 525		
Glu Leu Asn Ala Ala Ile Pro Ser Ala Asn Pro Ala Lys Thr Met Gln 530 535 540		
Gly Ser Glu Val Val Xaa Val Leu Lys Ser Leu Leu Ser Asn Leu Asp 545 550 555 560		
Glu Val Lys Lys Glu Arg Glu Gly Leu Glu Asn Asp Leu Lys Ser Val 565 570 575		
Asn Phe Asp Met Thr Ser Lys Phe Leu Thr Ala Leu Ala Gln Asp Gly 580 585 590		
Val Ile Asn Glu Glu Ala Leu Ser Val Thr Glu Leu Asp Arg Val Tyr 595 600 605		
Gly Gly Leu Thr Thr Lys Val Gln Glu Ser Leu Lys Lys Gln Glu Gly 610 615 620		
Leu Leu Lys Asn Ile Gln Val Ser His Gln Glu Phe Ser Lys Met Lys 625 630 635 640		
Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu		

645					650					655					
Ala	Thr	Ala	Tyr	Asp	Asn	Phe	Val	Glu	Leu	Val	Ala	Asn	Leu	Lys	Glu
		660						665					670		
Gly	Thr	Lys	Phe	Tyr	Asn	Glu	Leu	Thr	Glu	Ile	Leu	Val	Arg	Phe	Gln
		675					680					685			
Asn	Lys	Cys	Ser	Asp	Ile	Val	Phe	Ala	Arg	Lys	Thr	Glu	Arg	Asp	Glu
	690					695					700				
Leu	Leu	Lys	Asp	Leu	Gln	Gln	Ser	Ile	Ala	Arg	Glu	Pro	Ser	Ala	Pro
705					710					715					720
Ser	Ile	Pro	Thr	Pro	Ala	Tyr	Gln	Ser	Leu	Pro	Ala	Gly	Gly	His	Ala
				725					730					735	
Pro	Thr	Pro	Pro	Thr	Pro	Ala	Pro	Arg	Thr	Met	Pro	Pro	Thr	Lys	Pro
			740					745					750		
Gln	Pro	Pro	Ala	Arg	Pro	Pro	Pro	Pro	Val	Leu	Pro	Ala	Asn	Arg	Ala
	755						760					765			
Pro	Ser	Ala	Thr	Ala	Pro	Ser	Pro	Val	Gly	Ala	Gly	Thr	Ala	Ala	Pro
	770					775					780				
Ala	Pro	Ser	Gln	Thr	Pro	Gly	Ser	Ala	Pro	Pro	Pro	Gln	Ala	Gln	Gly
785					790					795					800
Pro	Pro	Tyr	Pro	Thr	Tyr	Pro	Gly	Tyr	Pro	Gly	Tyr	Cys	Gln	Met	Pro
				805					810					815	
Met	Pro	Met	Gly	Tyr	Asn	Pro	Tyr	Ala	Tyr	Gly	Gln	Tyr	Asn	Met	Pro
			820					825					830		
Tyr	Pro	Pro	Val	Tyr	His	Gln	Ser	Pro	Gly	Gln	Ala	Pro	Tyr	Pro	Gly
		835					840					845			
Pro	Gln	Gln	Pro	Ser	Tyr	Pro	Phe	Pro	Gln	Pro	Pro	Gln	Gln	Ser	Tyr
	850					855					860				
Tyr	Pro	Gln	Gln												
865															

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<210> 2180
<211> 102
<212> PRT
<213> Homo sapiens
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<400> 2180

Met Lys Pro Ala Thr Ala Ser Ala Leu Leu Leu Leu Leu Gly Leu  
1 5 10 15

Ala Trp Thr Gln Gly Ser His Gly Trp Gly Ala Asp Ala Ser Ser Leu  
20 25 30

Gln Lys Arg Ala Gly Arg Ala Asp Gln Pro Gly Ala Gly Trp Gln Glu  
35 40 45

Val Ala Ala Val Thr Ser Lys Asn Tyr Asn Tyr Asn Gln His Ala Tyr  
50 55 60

Pro Thr Ala Tyr Gly Gly Lys Tyr Ser Val Lys Thr Pro Ala Lys Gly  
65 70 75 80

Gly Val Ser Pro Ser Ser Ser Ala Ser Arg Val Gln Pro Gly Leu Leu  
85 90 95

Gln Trp Val Lys Phe Trp  
100

<210> 2181  
<211> 140  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (36)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2181  
Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly Leu Phe Val  
1 5 10 15

Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu Val Tyr Val  
20 25 30

Trp Ser Arg Xaa Asn Pro Tyr Val Arg Met Asn Phe Phe Gly Leu Leu  
35 40 45

Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly Phe Ser Leu  
50 55 60

Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile Ala Val Gly  
65 70 75 80

His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly  
85 90 95

Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile Phe Asp Thr  
100 105 110

Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu Arg Pro Gly  
115 120 125

Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly  
130 135 140

<210> 2182  
<211> 156  
<212> PRT  
<213> Homo sapiens

<400> 2182

Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp Phe Val Phe  
1 5 10 15  
Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly Leu Phe Val  
20 25 30  
Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu Val Tyr Val  
35 40 45  
Trp Ser Arg Arg Asn Pro Tyr Val Arg Met Asn Phe Phe Gly Leu Leu  
50 55 60  
Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly Phe Ser Leu  
65 70 75 80  
Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile Ala Val Gly  
85 90 95  
His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly  
100 105 110  
Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile Phe Asp Thr  
115 120 125  
Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu Arg Pro Gly  
130 135 140  
Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly  
145 150 155

<210> 2183

<211> 239

<212> PRT

<213> Homo sapiens

<400> 2183

Met Ala Tyr Gln Ser Leu Arg Leu Glu Tyr Leu Gln Ile Pro Pro Val  
1 5 10 15  
Ser Arg Ala Tyr Thr Thr Ala Cys Val Leu Thr Thr Ala Ala Val Gln  
20 25 30  
Leu Glu Leu Ile Thr Pro Phe Gln Leu Tyr Phe Asn Pro Glu Leu Ile  
35 40 45  
Phe Lys His Phe Gln Ile Trp Arg Leu Ile Thr Asn Phe Leu Phe Phe  
50 55 60  
Gly Pro Val Gly Phe Asn Phe Leu Phe Asn Met Ile Phe Leu Tyr Arg  
65 70 75 80  
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp  
85 90 95  
Phe Val Phe Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly  
100 105 110

Leu Phe Val Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu  
 115 120 125  
 Val Tyr Val Trp Ser Arg Arg Asn Pro Tyr Val Arg Met Asn Phe Phe  
 130 135 140  
 Gly Leu Leu Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly  
 145 150 155 160  
 Phe Ser Leu Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile  
 165 170 175  
 Ala Val Gly His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln  
 180 185 190  
 Pro Gly Gly Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile  
 195 200 205  
 Phe Asp Thr Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu  
 210 215 220  
 Arg Pro Gly Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly  
 225 230 235

<210> 2184  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 2184

Met Thr Leu Phe Gly Leu Phe Val Ser Leu Val Phe Leu Gly Gln Ala  
 1 5 10 15  
 Phe Thr Ile Met Leu Val Tyr Val Trp Ser Arg Arg Asn Pro Tyr Val  
 20 25 30  
 Arg Met Asn Phe Phe Gly Leu Leu Asn Phe Gln Ala Pro Phe Leu Pro  
 35 40 45  
 Trp Val Leu Met Gly Phe Ser Leu Leu Leu Gly Asn Ser Ile Ile Val  
 50 55 60  
 Asp Leu Leu Gly Ile Ala Val Gly His Ile Tyr Phe Phe Leu Glu Asp  
 65 70 75 80  
 Val Phe Pro Asn Gln Pro Gly Gly Ile Arg Ile Leu Lys Thr Pro Ser  
 85 90 95  
 Ile Leu Lys Ala Ile Phe Asp Thr Pro Asp Glu Asp Pro Asn Tyr Asn  
 100 105 110  
 Pro Leu Pro Glu Glu Arg Pro Gly Gly Phe Ala Trp Gly Glu Gly Gln  
 115 120 125  
 Arg Leu Gly Gly  
 130

<210> 2185  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 2185

Met	Ser	Trp	Ser	Thr	Phe	Leu	Leu	Ala	Glu	Ala	Cys	Gly	Phe	Thr	Gly
1				5					10					15	
Val	Val	Ala	Val	Leu	Phe	Cys	Gly	Ile	Thr	Gln	Ala	His	Tyr	Thr	Tyr
			20					25					30		
Asn	Asn	Leu	Ser	Val	Glu	Ser	Arg	Ser	Arg	Thr	Lys	Gln	Leu	Phe	Glu
		35					40					45			
Val	Leu	His	Phe	Leu	Ala	Glu	Asn	Phe	Ile	Phe	Ser	Tyr	Met	Gly	Leu
	50					55					60				
Ala	Leu	Phe	Thr	Phe	Gln	Lys	His	Val	Phe	Ser	Pro	Ile	Phe	Ile	Ile
65					70					75					80
Gly	Ala	Phe	Val	Ala	Ile	Phe	Leu	Gly	Arg	Ala	Ala	His	Ile	Tyr	Pro
				85					90					95	
Leu	Ser	Phe	Phe	Leu	Asn	Leu	Gly	Arg	Arg	His	Lys	Ile	Gly	Trp	Asn
			100					105					110		
Phe	Gln	His	Met	Met	Met	Phe	Ser	Gly	Leu	Arg	Gly	Ala	Met	Ala	Phe
		115						120				125			
Ala	Leu	Ala	Ile	Arg	Asp	Thr	Ala	Ser	Tyr	Ala	Arg	Gln	Met	Met	Phe
	130					135					140				
Thr	Thr	Thr	Leu	Leu	Ile	Val	Phe	Phe	Thr	Val	Trp	Ile	Ile	Gly	Gly
145				150						155					160
Gly	Thr	Thr	Pro	Met	Leu	Ser	Trp	Leu	Asn	Ile	Arg	Val	Gly	Val	Asp
				165					170					175	
Pro	Asp	Gln	Asp	Pro	Pro	Pro	Asn	Asn	Asp	Ser	Phe	Gln	Val	Leu	Gln
			180					185					190		
Gly	Asp	Gly	Pro	Asp	Ser	Ala	Arg	Gly	Asn	Arg	Thr	Lys	Gln	Glu	Ser
	195						200					205			
Ala	Trp	Ile	Phe	Arg	Leu	Trp	Tyr	Ser	Phe	Asp	His	Asn	Tyr	Leu	Lys
	210					215					220				
Pro	Ile	Leu	Thr	His	Ser	Gly	Pro	Pro	Leu	Thr	Thr	Thr	Leu	Pro	Ala
225					230					235					240
Trp	Cys	Gly	Leu	Leu	Ala	Arg	Cys	Leu	Thr	Ser	Pro	Gln	Val	Tyr	Asp
				245					250					255	
Asn	Gln	Glu	Pro	Leu	Arg	Glu	Glu	Asp	Ser	Asp	Phe	Ile	Leu	Thr	Glu
			260					265					270		
Gly	Asp	Leu	Thr	Leu	Thr	Tyr	Gly	Asp	Ser	Thr	Val	Thr	Ala	Asn	Gly
		275					280					285			

Ser Ser Ser Ser His Thr Ala Ser Thr Ser Leu Glu Gly Ser Arg Arg  
290 295 300

Thr Lys Ser Ser Ser Glu Glu Val Leu Glu Arg Asp Leu Gly Met Gly  
305 310 315 320

Asp Gln Lys Val Ser Ser Arg Gly Thr Arg Leu Val Phe Pro Leu Glu  
325 330 335

Asp Asn Ala

<210> 2186

<211> 339

<212> PRT

<213> Homo sapiens

<400> 2186

Met Ser Trp Ser Thr Phe Leu Leu Ala Glu Ala Cys Gly Phe Thr Gly  
1 5 10 15

Val Val Ala Val Leu Phe Cys Gly Ile Thr Gln Ala His Tyr Thr Tyr  
20 25 30

Asn Asn Leu Ser Val Glu Ser Arg Ser Arg Thr Lys Gln Leu Phe Glu  
35 40 45

Val Leu His Phe Leu Ala Glu Asn Phe Ile Phe Ser Tyr Met Gly Leu  
50 55 60

Ala Leu Phe Thr Phe Gln Lys His Val Phe Ser Pro Ile Phe Ile Ile  
65 70 75 80

Gly Ala Phe Val Ala Ile Phe Leu Gly Arg Ala Ala His Ile Tyr Pro  
85 90 95

Leu Ser Phe Phe Leu Asn Leu Gly Arg Arg His Lys Ile Gly Trp Asn  
100 105 110

Phe Gln His Met Met Met Phe Ser Gly Leu Arg Gly Ala Met Ala Phe  
115 120 125

Ala Leu Ala Ile Arg Asp Thr Ala Ser Tyr Ala Arg Gln Met Met Phe  
130 135 140

Thr Thr Thr Leu Leu Ile Val Phe Phe Thr Val Trp Ile Ile Gly Gly  
145 150 155 160

Gly Thr Thr Pro Met Leu Ser Trp Leu Asn Ile Arg Val Gly Val Asp  
165 170 175

Pro Asp Gln Asp Pro Pro Pro Asn Asn Asp Ser Phe Gln Val Leu Gln  
180 185 190

Gly Asp Gly Pro Asp Ser Ala Arg Gly Asn Arg Thr Lys Gln Glu Ser  
195 200 205















Ala Arg Leu Ser Pro Pro Leu Asn Xaa Leu His Ala Pro Pro Lys Lys  
 500 505 510  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 515 520 525  
 Lys Lys  
 530

<210> 2190  
 <211> 265  
 <212> PRT  
 <213> Homo sapiens

<400> 2190  
 Met Gly Gly Gln Val Ala Gly Val Tyr Ala Ala Tyr Tyr Pro Ser Asp  
 1 5 10 15  
 Val Ser Ser Leu Cys Leu Val Cys Pro Ala Gly Leu Gln Tyr Ser Thr  
 20 25 30  
 Asp Asn Gln Phe Val Gln Arg Leu Lys Glu Leu Gln Gly Ser Ala Ala  
 35 40 45  
 Val Glu Lys Ile Pro Leu Ile Pro Ser Thr Pro Glu Glu Met Ser Glu  
 50 55 60  
 Met Leu Gln Leu Cys Ser Tyr Val Arg Phe Lys Val Pro Gln Gln Ile  
 65 70 75 80  
 Leu Gln Gly Leu Val Asp Val Arg Ile Pro His Asn Asn Phe Tyr Arg  
 85 90 95  
 Lys Leu Phe Leu Glu Ile Val Ser Glu Lys Ser Arg Tyr Ser Leu His  
 100 105 110  
 Gln Asn Met Asp Lys Ile Lys Val Pro Thr Gln Ile Ile Trp Gly Lys  
 115 120 125  
 Gln Asp Ala Gly Ala Gly Cys Val Trp Gly Arg His Val Gly Gln Val  
 130 135 140  
 Asn Cys Gln Leu Pro Gly Gly Ala Ser Gly Lys Leu Trp Ala Leu Ser  
 145 150 155 160  
 Ser Asp Gly Lys Thr Gln Glu Asp Ser Gln Ala His Asn Arg Leu Phe  
 165 170 175  
 Ser Phe Cys Ala Gln His Arg Gln Gln Gln Glu Ala Gly Leu Arg Pro  
 180 185 190  
 Arg Leu Gln Pro Ala Phe Cys Thr Gln His Leu Leu Pro Ser Pro Lys  
 195 200 205  
 Ser Asp Ala Ala Thr Thr Leu Arg Asp Pro Ala Pro Asn Ala Val Gly  
 210 215 220  
 Ala Pro Val Thr Leu Arg Lys Pro Val Pro Tyr Pro Trp Tyr Pro Arg

1451

0933245-041201





Ala Gly Lys Asn Met Ser Ala Arg Leu Thr Val Val Cys Lys Gln Cys  
85 90 95

Pro Leu Leu Arg Arg Gly Leu Asn Tyr Ile Ile Met Gly Gln Val Gly  
100 105 110

Glu Asp Gly Arg Gly Lys Ile Met Pro Asn Ser Phe Ile Met Met Phe  
115 120 125

Lys Thr Lys Asn Gln Lys Leu Leu Asp Ala Leu Lys Asn Lys Gln Cys  
130 135 140

<210> 2193  
<211> 294  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (93)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (97)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2193  
Met Met Val Gln Met Ile Ser Asp Ala Asn Thr Ala Gly Asn Gly Phe  
1 5 10 15

Met Ala Met Phe Ser Ala Ala Glu Pro Asn Glu Arg Gly Asp Gln Tyr  
20 25 30

Cys Gly Gly Leu Leu Asp Arg Pro Ser Gly Ser Phe Lys Thr Pro Asn  
35 40 45

Trp Pro Asp Arg Asp Tyr Pro Ala Gly Val Thr Cys Val Trp His Ile  
50 55 60

Val Ala Pro Lys Asn Gln Leu Ile Glu Leu Lys Phe Glu Lys Phe Asp  
65 70 75 80

Val Glu Arg Asp Asn Tyr Cys Arg Tyr Asp Tyr Val Xaa Val Phe Asn  
85 90 95

Xaa Gly Glu Val Asn Asp Ala Arg Arg Ile Gly Lys Tyr Cys Gly Asp  
100 105 110

Ser Pro Pro Ala Pro Ile Val Ser Glu Arg Asn Glu Leu Leu Ile Gln  
115 120 125

Phe Leu Ser Asp Leu Ser Leu Thr Ala Asp Gly Phe Ile Gly His Tyr  
130 135 140



115				120				125							
Leu	Glu	Tyr	Arg	Gly	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Ile	Leu	Val	Thr
	130					135					140				
Val	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu
145					150					155					160
Asp	Ser	Thr	Pro	Gln	Asp	Gly	Asn	Val	Val	Val	Ala	Cys	Leu	Val	Gln
				165					170					175	
Gly	Phe	Phe	Pro	Gln	Glu	Pro	Leu	Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly
			180					185					190		
Gln	Asn	Val	Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly
		195					200					205			
Asp	Leu	Tyr	Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys
	210					215					220				
Pro	Asp	Gly	Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro
225					230					235					240
Ser	Gln	Asp	Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Pro	Pro	Pro	Pro	Cys
				245					250					255	
Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu
			260					265					270		
Leu	Gly	Ser	Glu	Ala	Asn	Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp
		275					280					285			
Ala	Ser	Gly	Ala	Thr	Phe	Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala
	290					295					300				
Val	Gln	Gly	Pro	Pro	Glu	Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser
305					310					315					320
Ser	Val	Leu	Pro	Gly	Cys	Ala	Gln	Pro	Trp	Asn	His	Gly	Glu	Thr	Phe
				325					330					335	
Thr	Cys	Thr	Ala	Ala	His	Pro	Glu	Leu	Lys	Thr	Pro	Leu	Thr	Ala	Asn
			340					345					350		
Ile	Thr	Lys	Ser	Gly	Asn	Thr	Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro
		355					360					365			
Pro	Pro	Ser	Glu	Glu	Leu	Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys
	370					375					380				
Leu	Ala	Arg	Gly	Phe	Ser	Pro	Lys	Asp	Val	Leu	Val	Arg	Trp	Leu	Gln
385					390					395					400
Gly	Ser	Gln	Glu	Leu	Pro	Arg	Glu	Lys	Tyr	Leu	Thr	Trp	Ala	Ser	Arg
				405					410					415	
Gln	Glu	Pro	Ser	Gln	Gly	Thr	Thr	Thr	Phe	Ala	Val	Thr	Ser	Ile	Leu
				420				425					430		
Arg	Val	Ala	Ala	Glu	Asp	Trp	Lys	Lys	Gly	Asp	Thr	Phe	Ser	Cys	Met

435 440 445  
Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp  
450 455 460  
Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala  
465 470 475 480  
Glu Val Asp Gly Thr Cys Tyr  
485

<210> 2195  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 2195  
Met Gly Gly Gln Val Ala Gly Val Tyr Ala Ala Tyr Tyr Pro Ser Asp  
1 5 10 15  
Val Ser Ser Leu Cys Leu Val Cys Pro Ala Gly Leu Gln Tyr Ser Thr  
20 25 30  
Asp Asn Gln Phe Val Gln Arg Leu Lys Glu Leu Gln Gly Ser Ala Ala  
35 40 45  
Val Glu Lys Ile Pro Leu Ile Pro Ser Thr Pro Glu Glu Met Ser Glu  
50 55 60  
Met Leu Gln Leu Cys Ser Tyr Val Arg Phe Lys Val Pro Gln Gln Ile  
65 70 75 80  
Leu Gln Gly Leu Val Asp Val Arg Ile Pro His Asn Asn Phe Tyr Arg  
85 90 95  
Lys Leu Phe Leu Glu Ile Val Ser Glu Lys Ser Arg Tyr Ser Leu His  
100 105 110  
Gln Asn Met Asp Lys Ile Lys Val Pro Thr Gln Ile Ile Trp Gly Lys  
115 120 125  
Gln Asp Gln Val Leu Asp Val Ser Gly Ala Asp Met Leu Ala Lys Ser  
130 135 140  
Ile Ala Asn Cys Gln Val Glu Leu Leu Glu Asn Cys Gly His Ser Val  
145 150 155 160  
Val Met Glu Arg Pro Arg Lys Thr Ala Lys Leu Ile Ile Asp Phe Leu  
165 170 175  
Ala Ser Val His Asn Thr Asp Asn Asn Lys Lys Leu Asp  
180 185

<210> 2196  
<211> 298  
<212> PRT

<213> Homo sapiens

<400> 2196

Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Val Pro Leu  
1 5 10 15  
Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp  
20 25 30  
Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu  
35 40 45  
Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile  
50 55 60  
Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr  
65 70 75 80  
Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu  
85 90 95  
Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp  
100 105 110  
Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe  
115 120 125  
Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn  
130 135 140  
Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp  
145 150 155 160  
Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu  
165 170 175  
Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe  
180 185 190  
Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala  
195 200 205  
Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala  
210 215 220  
Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His  
225 230 235 240  
Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys  
245 250 255  
Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu  
260 265 270  
Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys  
275 280 285  
Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe  
290 295

<210> 2197  
 <211> 298  
 <212> PRT  
 <213> Homo sapiens

<400> 2197

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Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Leu Val Pro Leu
  1                      5                      10                      15

Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp
                20                      25                      30

Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu
                35                      40                      45

Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile
    50                      55                      60

Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr
    65                      70                      75                      80

Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu
                85                      90                      95

Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp
    100                      105                      110

Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe
    115                      120                      125

Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn
    130                      135                      140

Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp
    145                      150                      155                      160

Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu
                165                      170                      175

Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe
    180                      185                      190

Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala
    195                      200                      205

Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala
    210                      215                      220

Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His
    225                      230                      235                      240

Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys
    245                      250                      255

Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu
    260                      265                      270

Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys

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1458

09833245 "041201

285

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<400> 2199
Met Ile Arg Thr Arg Arg Gly Trp Ser Ser Met Trp Pro Trp Ile Gly
  1           5           10           15
Val Gly Tyr Leu Ala Gly Cys Leu Val His Ala Leu Gly Glu Lys Gln
          20           25           30
Pro Glu Leu Gln Ile Ser Glu Arg Asp Val Leu Cys Val Gln Ile Ala
          35           40           45
Gly Leu Cys His Asp Leu Gly His Gly Pro Phe Ser His Met Phe Asp
          50           55           60
Gly Arg Phe Ile Pro Leu Ala Arg Pro Glu Val Lys Trp Thr His Glu
  65           70           75           80
Gln Gly Ser Val Met Met Phe Glu His Leu Ile Asn Ser Asn Gly Ile
          85           90           95
Lys Pro Val Met Glu Gln Tyr Gly Leu Ile Pro Glu Glu Asp Ile Cys
          100          105          110
Phe Ile Lys Glu Gln Ile Val Gly Pro Leu Glu Ser Pro Val Glu Asp
          115          120          125
Ser Leu Trp Pro Tyr Lys Gly Arg Pro Glu Asn Lys Ser Phe Leu Tyr
          130          135          140
Glu Ile Val Ser Asn Lys Arg Asn Gly Ile Asp Val Asp Lys Trp Asp
          145          150          155          160

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1459

Tyr Phe Ala Arg Asp Cys His His Leu Gly Ile Gln Asn Asn Phe Asp  
 165 170 175  
 Tyr Lys Arg Phe Ile Lys Phe Ala Arg Val Cys Glu Val Asp Asn Glu  
 180 185 190  
 Leu Arg Ile Cys Ala Arg Asp Lys Glu Val Gly Asn Leu Tyr Asp Met  
 195 200 205  
 Phe His Thr Arg Asn Ser Leu His Arg Arg Ala Tyr Gln His Lys Val  
 210 215 220  
 Gly Asn Ile Ile Asp Thr Met Ile Thr Asp Ala Phe Leu Glu Ala Asp  
 225 230 235 240  
 Asp Tyr Ile Glu Ile Thr Gly Ala Gly Gly Lys Lys Tyr Arg Ile Ser  
 245 250 255  
 Thr Ala Ile Asp Asp Met Glu Ala Tyr Thr Lys Leu Thr Asp Asn Ile  
 260 265 270  
 Phe Leu Glu Ile Leu Tyr Ser Thr Asp Pro Lys Leu Lys Asp Ala Arg  
 275 280 285  
 Glu Ile Leu Lys Gln Ile Glu Tyr Arg Asn Leu Phe Lys Tyr Val Gly  
 290 295 300  
 Glu Thr Gln Pro Thr Gly Gln Ile Lys Ile Lys Arg Glu Asp Tyr Glu  
 305 310 315 320  
 Ser Leu Pro Lys Glu Val Ala Ser Ala Lys Pro Lys Val Leu Leu Asp  
 325 330 335  
 Val Lys Leu Lys Ala Glu Asp Phe Ile Val Asp Val Ile Asn Met Asp  
 340 345 350  
 Tyr Gly Met Gln Glu Lys Asn Pro Ile Asp His Val Ser Phe Tyr Cys  
 355 360 365  
 Lys Thr Ala Pro Asn Arg Ala Ile Arg Ile Thr Lys Asn Gln Val Ser  
 370 375 380  
 Gln Leu Leu Pro Glu Lys Phe Ala Glu Gln Leu Ile Arg Val Tyr Cys  
 385 390 395 400  
 Lys Lys Val Asp Arg Lys Ser Leu Tyr Ala Ala Arg Gln Tyr Phe Val  
 405 410 415  
 Gln Trp Cys Ala Asp Arg Asn Phe Thr Lys Pro Gln Asp Gly Asp Val  
 420 425 430  
 Ile Ala Pro Leu Ile Thr Pro Gln Lys Lys Glu Trp Asn Asp Ser Thr  
 435 440 445  
 Ser Val Gln Asn Pro Thr Arg Leu Arg Glu Ala Ser Lys Ser Arg Val  
 450 455 460  
 Gln Leu Phe Lys Asp Asp Pro Met  
 465 470



<210> 2200  
 <211> 626  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (353)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (354)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (363)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2200  
 Met Gln Arg Ala Asp Ser Glu Gln Pro Ser Lys Arg Pro Arg Cys Asp  
 1 5 10 15  
 Asp Ser Pro Arg Thr Pro Ser Asn Thr Pro Ser Ala Glu Ala Asp Trp  
 20 25 30  
 Ser Pro Gly Leu Glu Leu His Pro Asp Tyr Lys Thr Trp Gly Pro Glu  
 35 40 45  
 Gln Val Cys Ser Phe Leu Arg Arg Gly Gly Phe Glu Glu Pro Val Leu  
 50 55 60  
 Leu Lys Asn Ile Arg Glu Asn Glu Ile Thr Gly Ala Leu Leu Pro Cys  
 65 70 75 80  
 Leu Asp Glu Ser Arg Phe Glu Asn Leu Gly Val Ser Ser Leu Gly Glu  
 85 90 95  
 Arg Lys Lys Leu Leu Ser Tyr Ile Gln Arg Leu Val Gln Ile His Val  
 100 105 110  
 Asp Thr Met Lys Val Ile Asn Asp Pro Ile His Gly His Ile Glu Leu  
 115 120 125  
 His Pro Leu Leu Val Arg Ile Ile Asp Thr Pro Gln Phe Gln Arg Leu  
 130 135 140  
 Arg Tyr Ile Lys Gln Leu Gly Gly Gly Tyr Tyr Val Phe Pro Gly Ala  
 145 150 155 160  
 Ser His Asn Arg Phe Glu His Ser Leu Gly Val Gly Tyr Leu Ala Gly  
 165 170 175  
 Cys Leu Val His Ala Leu Gly Glu Lys Gln Pro Glu Leu Gln Ile Ser  
 180 185 190  
 Glu Arg Asp Val Leu Cys Val Gln Ile Ala Gly Leu Cys His Asp Leu  
 1461

09833345 "04.1201

195					200					205					
Gly	His	Gly	Pro	Phe	Ser	His	Met	Phe	Asp	Gly	Arg	Phe	Ile	Pro	Leu
210						215					220				
Ala	Arg	Pro	Glu	Val	Lys	Trp	Thr	His	Glu	Gln	Gly	Ser	Val	Met	Met
225					230					235					240
Phe	Glu	His	Leu	Ile	Asn	Ser	Asn	Gly	Ile	Lys	Pro	Val	Met	Glu	Gln
			245						250					255	
Tyr	Gly	Leu	Ile	Pro	Glu	Glu	Asp	Ile	Cys	Phe	Ile	Lys	Glu	Gln	Ile
		260						265					270		
Val	Gly	Pro	Leu	Glu	Ser	Pro	Val	Glu	Asp	Ser	Leu	Trp	Pro	Tyr	Lys
		275					280					285			
Gly	Arg	Pro	Glu	Asn	Lys	Ser	Phe	Leu	Tyr	Glu	Ile	Val	Ser	Asn	Lys
290						295					300				
Arg	Asn	Gly	Ile	Asp	Val	Asp	Lys	Trp	Asp	Tyr	Phe	Ala	Arg	Asp	Cys
305						310					315				320
His	His	Leu	Gly	Ile	Gln	Asn	Asn	Phe	Asp	Tyr	Lys	Arg	Phe	Ile	Lys
			325						330					335	
Phe	Ala	Arg	Val	Cys	Glu	Val	Asp	Asn	Glu	Leu	Arg	Ile	Cys	Ala	Arg
			340					345					350		
Xaa	Xaa	Glu	Val	Gly	Asn	Leu	Tyr	Asp	Met	Xaa	His	Thr	Arg	Asn	Ser
		355					360					365			
Leu	His	Arg	Arg	Ala	Tyr	Gln	His	Lys	Val	Gly	Asn	Ile	Ile	Asp	Thr
		370				375					380				
Met	Ile	Thr	Asp	Ala	Phe	Leu	Lys	Ala	Asp	Asp	Tyr	Ile	Glu	Ile	Thr
385						390					395				400
Gly	Ala	Gly	Gly	Lys	Lys	Tyr	Arg	Ile	Ser	Thr	Ala	Ile	Asp	Asp	Met
				405					410					415	
Glu	Ala	Tyr	Thr	Lys	Leu	Thr	Asp	Asn	Ile	Phe	Leu	Glu	Ile	Leu	Tyr
			420					425					430		
Ser	Thr	Asp	Pro	Lys	Leu	Lys	Asp	Ala	Arg	Glu	Ile	Leu	Lys	Gln	Ile
		435					440					445			
Glu	Tyr	Arg	Asn	Leu	Phe	Lys	Tyr	Val	Gly	Glu	Thr	Gln	Pro	Thr	Gly
		450				455					460				
Gln	Ile	Lys	Ile	Lys	Arg	Glu	Asp	Tyr	Glu	Ser	Leu	Pro	Lys	Glu	Val
465						470					475				480
Ala	Ser	Ala	Lys	Pro	Lys	Val	Leu	Leu	Asp	Val	Lys	Leu	Lys	Ala	Glu
				485					490					495	
Asp	Phe	Ile	Val	Asp	Val	Ile	Asn	Met	Asp	Tyr	Gly	Met	Gln	Glu	Lys
			500					505					510		
Asn	Pro	Ile	Asp	His	Val	Ser	Phe	Tyr	Cys	Lys	Thr	Ala	Pro	Asn	Arg

09833245 041201

515	520	525
Ala Ile Arg Ile Thr Lys	Asn Gln Val Ser Gln	Leu Leu Pro Glu Lys
530	535	540
Phe Ala Glu Gln Leu Ile	Arg Val Tyr Cys Lys	Lys Val Asp Arg Lys
545	550	555
Ser Leu Tyr Ala Ala Arg	Gln Tyr Phe Val Gln	Trp Cys Ala Asp Arg
565	570	575
Asn Phe Thr Lys Pro Gln	Asp Gly Asp Val Ile	Ala Pro Leu Ile Thr
580	585	590
Pro Gln Lys Lys Glu Trp	Asn Asp Ser Thr Ser	Val Gln Asn Pro Thr
595	600	605
Arg Leu Arg Glu Ala Ser	Lys Ser Arg Val Gln	Leu Phe Lys Asp Asp
610	615	620
Pro Met		
625		

<210> 2201  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (128)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2201
Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser
1 5 10 15
Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys
20 25 30
Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys
35 40 45
Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln
50 55 60
Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly
65 70 75 80
Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile
85 90 95
Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln
100 105 110
Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Xaa
115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr  
 130 135 140  
 Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr  
 145 150 155 160  
 Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val  
 165 170 175  
 Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr  
 180 185 190  
 Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln  
 195 200 205  
 Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly  
 210 215 220  
 His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu  
 225 230 235 240  
 Ile Phe Pro Ser Ala  
 245

<210> 2202  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 2202  
 Met Gly Val Asn Lys Val Leu Phe Thr Phe Phe Phe Phe Ser Ser Leu  
 1 5 10 15  
 Leu Asp Gly Val Gly Thr Ser His Ser Leu Ala Ser Phe Pro His Thr  
 20 25 30

<210> 2203  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 2203  
 Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser  
 1 5 10 15  
 Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys  
 20 25 30  
 Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys  
 35 40 45  
 Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln  
 50 55 60



Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile  
                     85                    90                    95  
 Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln  
                     100                    105                    110  
 Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly  
                     115                    120                    125  
 Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr  
                     130                    135                    140  
 Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr  
                     145                    150                    155                    160  
 Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val  
                     165                    170                    175  
 Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr  
                     180                    185                    190  
 Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln  
                     195                    200                    205  
 Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly  
                     210                    215                    220  
 His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu  
                     225                    230                    235                    240  
 Ile Phe Pro Ser Ala  
                     245

<210> 2205  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 2205  
 Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser  
   1                    5                    10                    15  
 Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys  
                     20                    25                    30  
 Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys  
                     35                    40                    45  
 Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln  
                     50                    55                    60  
 Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly  
                     65                    70                    75                    80  
 Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile  
                     85                    90                    95  
 Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln

100	105	110
Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly		
115	120	125
Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr		
130	135	140
Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr		
145	150	155
Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val		
	165	170
Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr		
	180	185
Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln		
	195	200
Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly		
	210	215
His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu		
225	230	235
Ile Phe Pro Ser Ala		
	245	

<210> 2206  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 2206
Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser
1 5 10 15
Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys
20 25 30
Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys
35 40 45
Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln
50 55 60
Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly
65 70 75 80
Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile
85 90 95
Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln
100 105 110
Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly
115 120 125





Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly  
100 105 110

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr  
115 120 125

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr  
130 135 140

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val  
145 150 155 160

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr  
165 170 175

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln  
180 185 190

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly  
195 200 205

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu  
210 215 220

Ile Phe Pro Ser Ala  
225

<210> 2208  
<211> 207  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (75)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (77)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (112)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 2208  
Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu  
1 5 10 15

Leu Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys  
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
50 55 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Xaa Gly Xaa Ala Glu Ile  
65 70 75 80

Pro Val Ser Val His Gly His Ser Ala Asp Pro Pro Ala Pro Cys Thr  
85 90 95

Gln Gln Pro Asp Gln Ile Gln Arg Gly Pro His Gln Pro Ala Glu Xaa  
100 105 110

Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr  
115 120 125

Tyr Phe Val Tyr His Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu  
130 135 140

Tyr Arg Ser Gly Val Lys Val Val Thr Phe Cys Gly His Thr Ser Lys  
145 150 155 160

Thr Asn Gln Val Asn Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly  
165 170 175

Glu Glu Val Trp Leu Ala Val Asn Asp Tyr Tyr Asp Met Val Gly Ile  
180 185 190

Gln Gly Ser Asp Ser Val Phe Ser Gly Phe Leu Leu Phe Pro Asp  
195 200 205

<210> 2209  
<211> 235  
<212> PRT  
<213> Homo sapiens

<400> 2209  
Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp  
1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Met Gln Met Thr Gln Ser Pro Ser Ser  
20 25 30

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Thr Ser  
35 40 45

Gln Ser Ile Gly Lys Phe Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln  
50 55 60

Ala Pro Lys Leu Leu Ile Ser Gly Ala Ser Ile Leu Gln Thr Gly Val  
65 70 75 80

Pro Ser Arg Phe Ser Gly Ser Gly Ser Ala Thr Tyr Phe Thr Leu Thr  
85 90 95

Ile Asn Asp Leu His Pro Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln  
100 105 110

Asp Tyr Thr Thr Pro Leu Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
1470

115	120	125
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu		
130	135	140
Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe		
145	150	155 160
Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln		
	165	170 175
Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser		
	180	185 190
Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu		
	195	200 205
Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser		
	210	215 220
Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys		
225	230	235

<210> 2210  
 <211> 234  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (120)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2210  
 Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp Leu Ser  
 1 5 10 15  
 Gly Ala Arg Cys Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser  
 20 25 30  
 Ala Ser Leu Gly Asp Ser Val Thr Ile Thr Cys Gln Ala Ser Gln Asp  
 35 40 45  
 Ile Ala Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Pro Pro  
 50 55 60  
 Lys Leu Val Ile Phe Asp Gly Ser Ile Leu His Thr Gly Val Pro Ser  
 65 70 75 80  
 Arg Phe Ser Gly Gly Gly Ser Gly Thr His Phe Thr Phe Thr Ile Asn  
 85 90 95  
 Asn Leu Gln Pro Asp Asp Val Ala Thr Tyr Ser Cys Gln Gln Tyr Asn  
 100 105 110  
 Thr Phe Pro Leu Thr Phe Gly Xaa Gly Thr Lys Val Glu Ile Lys Arg  
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln  
 130 135 140  
 Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr  
 145 150 155 160  
 Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser  
 165 170 175  
 Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr  
 180 185 190  
 Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys  
 195 200 205  
 His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro  
 210 215 220  
 Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
 225 230

<210> 2211  
 <211> 206  
 <212> PRT  
 <213> Homo sapiens

<400> 2211  
 Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys  
 20 25 30  
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
 35 40 45  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
 50 55 60  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Arg Tyr Lys Gln Lys Phe Gln  
 65 70 75 80  
 Ser Val Phe Thr Val Thr Arg Gln Thr His Gln Pro Pro Ala Pro Asn  
 85 90 95  
 Ser Leu Ile Arg Phe Asn Ala Val Leu Thr Asn Pro Gln Gly Asp Tyr  
 100 105 110  
 Asp Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr  
 115 120 125  
 Phe Val Tyr His Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr  
 130 135 140  
 Arg Ser Gly Val Lys Val Val Thr Phe Cys Gly His Thr Ser Lys Thr  
 145 150 155 160  
 Asn Gln Val Asn Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu

1472

09833245 "041201



[illegible]

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<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
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1474

Gln Ala Val Lys Tyr Glu Cys Ile Lys Gly Phe Thr Leu Ile Gly Glu  
 245 250 255

Asn Ser Asp Leu Leu Tyr Cys  
 260

<210> 2214  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 2214  
 Met Cys Leu Leu Gly Gly Leu Ser Ala Pro Pro Leu Leu Leu Leu Pro  
 1 5 10 15  
 Leu Leu Pro Leu Leu Leu Cys Pro Pro Thr Gly Arg Val Thr Ala Ala  
 20 25 30  
 Phe Pro Gln Ser Tyr Leu Met Pro Tyr Lys Val Trp Val Thr Asn Arg  
 35 40 45  
 Val Phe Leu Lys Asn Ser Gln  
 50 55

<210> 2215  
 <211> 350  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2215  
 Met Ala Xaa Xaa Val Val Leu Leu Ala Leu Val Ala Gly Val Leu Gly  
 1 5 10 15  
 Asn Glu Phe Ser Ile Leu Lys Ser Pro Gly Ser Val Val Phe Arg Asn  
 20 25 30  
 Gly Asn Trp Pro Ile Pro Gly Glu Arg Ile Pro Asp Val Ala Ala Leu  
 35 40 45  
 Ser Met Gly Phe Ser Val Lys Glu Asp Leu Ser Trp Pro Gly Leu Ala  
 50 55 60  
 Val Gly Asn Leu Phe His Arg Pro Arg Ala Thr Val Met Val Met Val  
 65 70 75 80





1	5	10	15
Asn Glu Phe Ser Ile Leu Lys Ser Pro Gly Ser Val Val Phe Arg Asn	20	25	30
Gly Asn Trp Pro Ile Pro Gly Glu Arg Ile Pro Asp Val Ala Ala Leu	35	40	45
Ser Met Gly Phe Ser Val Lys Glu Asp Leu Ser Trp Pro Gly Leu Ala	50	55	60
Val Gly Asn Leu Phe His Arg Pro Arg Ala Thr Val Met Val Met Val	65	70	75
Lys Gly Val Asn Lys Leu Ala Leu Pro Pro Gly Ser Val Ile Ser Tyr	85	90	95
Pro Leu Glu Asn Ala Val Pro Phe Ser Leu Asp Ser Val Ala Asn Ser	100	105	110
Ile His Ser Leu Phe Ser Glu Glu Thr Pro Val Val Leu Gln Leu Ala	115	120	125
Pro Ser Glu Glu Arg Val Tyr Met Val Gly Lys Ala Asn Ser Val Phe	130	135	140
Glu Asp Leu Ser Val Thr Leu Arg Gln Leu Arg Asn Arg Leu Phe Gln	145	150	155
Glu Asn Ser Val Leu Ser Ser Leu Pro Leu Asn Ser Leu Ser Arg Asn	165	170	175
Asn Glu Val Asp Leu Leu Phe Leu Ser Glu Leu Gln Val Leu His Asp	180	185	190
Ile Ser Ser Leu Leu Ser Arg His Lys His Leu Ala Lys Asp His Ser	195	200	205
Pro Asp Leu Tyr Ser Leu Glu Leu Ala Gly Leu Asp Glu Ile Gly Lys	210	215	220
Arg Tyr Gly Glu Asp Ser Glu Gln Phe Arg Asp Ala Ser Lys Ile Leu	225	230	235
Val Asp Ala Leu Gln Lys Phe Ala Asp Asp Met Tyr Ser Leu Tyr Gly	245	250	255
Gly Asn Ala Val Val Glu Leu Val Thr Val Lys Ser Phe Asp Thr Ser	260	265	270
Leu Ile Arg Lys Thr Arg Thr Ile Leu Glu Ala Lys Gln Ala Lys Asn	275	280	285
Pro Ala Ser Pro Tyr Asn Leu Ala Tyr Lys Tyr Asn Phe Glu Tyr Ser	290	295	300
Val Val Phe Asn Met Val Leu Trp Ile Met Ile Ala Leu Ala Leu Ala	305	310	315
Val Ile Ile Thr Ser Tyr Asn Ile Trp Asn Met Asp Pro Gly Tyr Asp			

325

330

335

Ser Ile Ile Tyr Arg Met Thr Asn Gln Lys Ile Arg Met Asp  
 340 345 350

&lt;210&gt; 2217

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 2217

Met Cys Ser Leu Phe His Ala Phe Ile Phe Ala Gln Leu Trp Thr Val  
 1 5 10 15

Tyr Cys Glu Gln Ser Ala Val Ala Thr Asn Leu Gln Asn Gln Asn Glu  
 20 25 30

Phe Ser Phe Thr Ala Ile Leu Thr Ala Leu Glu Phe Trp Ser Arg Val  
 35 40 45

Thr Pro Ser Ile Leu Gln Leu Met Ala His Asn Lys Xaa Met Val Glu  
 50 55 60

Met Val Cys Leu His Val Ile Ser Leu Met Glu Ala Leu Gln Xaa Cys  
 65 70 75 80

Asn Ser Thr Ile Phe Val Lys Leu Ile Pro Met Trp Leu Pro Met Ile  
 85 90 95

Gln Ser Asn Ile Lys His Leu Ser Ala Gly Leu Gln Leu Arg Leu Gln  
 100 105 110

Ala Ile Gln Asn His Val Asn His His Ser Leu Arg Thr Leu Pro Gly  
 115 120 125

Ser Gly Gln Ser Ser Ala Gly Leu Ala Ala Leu Arg Lys Trp Leu Gln  
 130 135 140

Cys Thr Gln Phe Lys Met Ala Gln Val Glu Ile Gln Ser Ser Glu Ala  
 145 150 155 160

Ala Ser Gln Phe Tyr Pro Leu  
 165

&lt;210&gt; 2218

&lt;211&gt; 110

1478

FOR "04120" STAGE 60

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<400> 2219  
Ile Ser Leu Leu Trp Asn Leu Trp Gln Ser Val Lys Ile Gly Cys Gly  
   1                               10                            15  
  
Glu Lys Leu Tyr Pro Gly His Thr Lys Asp Ser Arg Asn His Leu Gly  
           20                           25                        30  
  
Gln Asn Leu Ser Phe Leu His Phe Ile Tyr Leu Phe Pro Pro Pro His  
      35                      40                          45  
  
Ser Thr His Thr Leu Pro Thr Ser Ser Thr Ser Thr Phe Lys His Lys  
    50                             55                         60  
  
Asp Val Arg Val Phe Ser Leu Ser Val Ser Trp Arg Thr Gly Cys Trp  
  65                       70                     75                 80  
  
Glu Arg Lys Gly Gln Met Ser Lys Gly Gly Cys Arg Ala Gly Gln Ala  
            85                   90                    95
```



210

215

220

Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys Gly Glu Asn Ser  
 225 230 235 240

Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser Ser Xaa Thr Ser  
 245 250 255

Arg Asn Phe Gln Thr Lys  
 260

&lt;210&gt; 2221

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2221

Glu Leu Cys Arg Gln Pro Lys Pro Ser Thr Val Gln Ala Cys Asn Arg  
 1 5 10 15

Phe Asn Cys Pro Pro Ala Trp Tyr Pro Ala Gln Trp Gln Pro Cys Ser  
 20 25 30

Arg Thr Cys Gly Gly Gly Val Gln Lys Arg Glu Val Leu Cys Lys Gln  
 35 40 45

Arg Met Ala Asp Gly Ser Phe Leu Glu Leu Pro Glu Thr Phe Cys Ser  
 50 55 60

Ala Ser Lys Pro Ala Cys Gln Gln Ala Cys Lys Lys Asp Asp Cys Pro  
 65 70 75 80

Ser Glu Trp Leu Leu Ser Asp Trp Thr Glu Cys Ser Thr Ser Cys Gly  
 85 90 95

Glu Gly Thr Gln Thr Arg Ser Ala Ile Cys Arg Lys Met Leu Lys Thr  
 100 105 110

Gly Leu Ser Thr Val Val Asn Ser Thr Leu Cys Pro Pro Leu Pro Phe  
 115 120 125

Ser Ser Ser Ile Arg Pro Cys Met Leu Ala Thr Cys Ala Arg Pro Gly  
 130 135 140

Arg Pro Ser Thr Lys His Ser Pro His Ile Ala Ala Ala Arg Lys Val  
 145 150 155 160

Tyr Ile Gln Thr Arg Arg Gln Arg Lys Leu His Phe Val Val Gly Gly  
 165 170 175

Phe Ala Tyr Leu Leu Pro Lys Thr Ala Val Val Leu Arg Cys Pro Ala  
 180 185 190

Arg Arg Val Arg Lys Pro Leu Ile Thr Trp Glu Lys Asp Gly Gln His  
 195 200 205

Leu Ile Ser Ser Thr His Val Thr Val Ala Pro Phe Gly Tyr Leu Lys  
 210 215 220

1481

F024F40" 543E060

Ile	His	Arg	Leu	Lys	Pro	Ser	Asp	Ala	Gly	Val	Tyr	Thr	Cys	Ser	Ala	225	230	235	240
Gly	Pro	Ala	Arg	Glu	His	Phe	Val	Ile	Lys	Leu	Ile	Gly	Gly	Asn	Arg	245	250	255	
Lys	Leu	Val	Ala	Arg	Pro	Leu	Ser	Pro	Arg	Ser	Glu	Glu	Glu	Val	Leu	260	265	270	
Ala	Gly	Arg	Lys	Gly	Gly	Pro	Lys	Glu	Ala	Leu	Gln	Thr	His	Lys	His	275	280	285	
Gln	Asn	Gly	Ile	Phe	Ser	Asn	Gly	Ser	Lys	Ala	Glu	Lys	Arg	Gly	Leu	290	295	300	
Ala	Ala	Asn	Pro	Gly	Ser	Arg	Tyr	Asp	Asp	Leu	Val	Ser	Arg	Leu	Leu	305	310	315	320
Glu	Gln	Gly	Gly	Trp	Pro	Gly	Glu	Leu	Leu	Ala	Ser	Trp	Glu	Ala	Gln	325	330	335	
Asp	Ser	Ala	Glu	Arg	Asn	Thr	Thr	Ser	Glu	Glu	Asp	Pro	Gly	Ala	Glu	340	345	350	
Gln	Val	Leu	Leu	His	Leu	Pro	Phe	Thr	Met	Val	Thr	Glu	Gln	Arg	Arg	355	360	365	
Leu	Asp	Asp	Ile	Leu	Gly	Asn	Leu	Ser	Gln	Gln	Pro	Glu	Glu	Leu	Arg	370	375	380	
Asp	Leu	Tyr	Ser	Lys	His	Leu	Val	Ala	Gln	Leu	Ala	Gln	Glu	Ile	Phe	385	390	395	400
Arg	Ser	His	Leu	Glu	His	Gln	Asp	Thr	Leu	Leu	Lys	Pro	Ser	Glu	Arg	405	410	415	
Arg	Thr	Ser	Pro	Val	Thr	Leu	Ser	Pro	His	Lys	His	Val	Ser	Gly	Phe	420	425	430	
Ser	Ser	Ser	Leu	Arg	Thr	Ser	Ser	Thr	Gly	Asp	Ala	Gly	Gly	Gly	Ser	435	440	445	
Arg	Arg	Pro	His	Arg	Lys	Pro	Thr	Ile	Leu	Arg	Lys	Ile	Ser	Ala	Ala	450	455	460	
Gln	Gln	Leu	Ser	Ala	Ser	Glu	Val	Val	Thr	His	Leu	Gly	Gln	Thr	Val	465	470	475	480
Ala	Leu	Ala	Ser	Gly	Thr	Leu	Ser	Val	Phe	Cys	Thr	Val	Arg	Pro	Ser	485	490	495	
Ala	Thr	Gln	Gly	Leu	Pro	Ser	Ala	Gly	Pro	Gly	Met	Glu	Lys	Lys	Ser	500	505	510	
Val	Gln																		

<210> 2222  
 <211> 1745  
 <212> PRT  
 <213> Homo sapiens

<400> 2222

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Met Glu Cys Cys Arg Arg Ala Thr Pro Gly Thr Leu Leu Leu Phe Leu
 1          5          10          15

Ala Phe Leu Leu Leu Ser Ser Arg Thr Ala Arg Ser Glu Glu Asp Arg
      20          25          30

Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys Ser Arg Thr
      35          40          45

Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys Leu Ser Ser Lys
      50          55          60

Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg Thr Cys Ser Asn Val Asp
      65          70          75          80

Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala Gln Gln Cys Ser Ala His
      85          90          95

Asn Asp Val Lys His His Gly Gln Phe Tyr Glu Trp Leu Pro Val Ser
      100          105          110

Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys Cys Gln Ala Lys Gly Thr
      115          120          125

Thr Leu Val Val Glu Leu Ala Pro Lys Val Leu Asp Gly Thr Arg Cys
      130          135          140

Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu Cys Gln Ile Val
      145          150          155          160

Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu Asp Asn Cys Gly
      165          170          175

Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val Arg Gly Gln Tyr
      180          185          190

Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr Val Val Ala Ile
      195          200          205

Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys Gly Pro Asp His
      210          215          220

Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys Gly Glu Asn Ser
      225          230          235          240

Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser Ser Val Asp Phe
      245          250          255

Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala Gly Pro Leu Thr
      260          265          270

Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser Ala Asp Ser Thr
      275          280          285

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Gly Val Gln Glu Ala Val Val Ser Cys Leu Asn Lys Gln Thr Arg Glu  
610 615 620

Pro Ala Glu Glu Asn Leu Cys Val Thr Ser Arg Arg Pro Pro Gln Leu  
625 630 635 640

Leu Lys Ser Cys Asn Leu Asp Pro Cys Pro Ala Arg Trp Glu Ile Gly  
645 650 655

Lys Trp Ser Pro Cys Ser Leu Thr Cys Gly Val Gly Leu Gln Thr Arg  
660 665 670

Asp Val Phe Cys Ser His Leu Leu Ser Arg Glu Met Asn Glu Thr Val  
675 680 685

Ile Leu Ala Asp Glu Leu Cys Arg Gln Pro Lys Pro Ser Thr Val Gln  
690 695 700

Ala Cys Asn Arg Phe Asn Cys Pro Pro Ala Trp Tyr Pro Ala Gln Trp  
705 710 715 720

Gln Pro Cys Ser Arg Thr Cys Gly Gly Gly Val Gln Lys Arg Glu Val  
725 730 735

Leu Cys Lys Gln Arg Met Ala Asp Gly Ser Phe Leu Glu Leu Pro Glu  
740 745 750

Thr Phe Cys Ser Ala Ser Lys Pro Ala Cys Gln Gln Ala Cys Lys Lys  
755 760 765

Asp Asp Cys Pro Ser Glu Trp Leu Leu Ser Asp Trp Thr Glu Cys Ser  
770 775 780

Thr Ser Cys Gly Glu Gly Thr Gln Thr Arg Ser Ala Ile Cys Arg Lys  
785 790 795 800

Met Leu Lys Thr Gly Leu Ser Thr Val Val Asn Ser Thr Leu Cys Pro  
805 810 815

Pro Leu Pro Phe Ser Ser Ser Ile Arg Pro Cys Met Leu Ala Thr Cys  
820 825 830

Ala Arg Pro Gly Arg Pro Ser Thr Lys His Ser Pro His Ile Ala Ala  
835 840 845

Ala Arg Lys Val Tyr Ile Gln Thr Arg Arg Gln Arg Lys Leu His Phe  
850 855 860

Val Val Gly Gly Phe Ala Tyr Leu Leu Pro Lys Thr Ala Val Val Leu  
865 870 875 880

Arg Cys Pro Ala Arg Arg Val Arg Lys Pro Leu Ile Thr Trp Glu Lys  
885 890 895

Asp Gly Gln His Leu Ile Ser Ser Thr His Val Thr Val Ala Pro Phe  
900 905 910

Gly Tyr Leu Lys Ile His Arg Leu Lys Pro Ser Asp Ala Gly Val Tyr  
915 920 925

Thr Cys Ser Ala Gly Pro Ala Arg Glu His Phe Val Ile Lys Leu Ile  
930 935 940

Gly Gly Asn Arg Lys Leu Val Ala Arg Pro Leu Ser Pro Arg Ser Glu  
945 950 955 960

Glu Glu Val Leu Ala Gly Arg Lys Gly Gly Pro Lys Glu Ala Leu Gln  
965 970 975

Thr His Lys His Gln Asn Gly Ile Phe Ser Asn Gly Ser Lys Ala Glu  
980 985 990

Lys Arg Gly Leu Ala Ala Asn Pro Gly Ser Arg Tyr Asp Asp Leu Val  
995 1000 1005

Ser Arg Leu Leu Glu Gln Gly Gly Trp Pro Gly Glu Leu Leu Ala Ser  
1010 1015 1020

Trp Glu Ala Gln Asp Ser Ala Glu Arg Asn Thr Thr Ser Glu Glu Asp  
1025 1030 1035 1040

Pro Gly Ala Glu Gln Val Leu Leu His Leu Pro Phe Thr Met Val Thr  
1045 1050 1055

Glu Gln Arg Arg Leu Asp Asp Ile Leu Gly Asn Leu Ser Gln Gln Pro  
1060 1065 1070

Glu Glu Leu Arg Asp Leu Tyr Ser Lys His Leu Val Ala Gln Leu Ala  
1075 1080 1085

Gln Glu Ile Phe Arg Ser His Leu Glu His Gln Asp Thr Leu Leu Lys  
1090 1095 1100

Pro Ser Glu Arg Arg Thr Ser Pro Val Thr Leu Ser Pro His Lys His  
1105 1110 1115 1120

Val Ser Gly Phe Ser Ser Ser Leu Arg Thr Ser Ser Thr Gly Asp Ala  
1125 1130 1135

Gly Gly Gly Ser Arg Arg Pro His Arg Lys Pro Thr Ile Leu Arg Lys  
1140 1145 1150

Ile Ser Ala Ala Gln Gln Leu Ser Ala Ser Glu Val Val Thr His Leu  
1155 1160 1165

Gly Gln Thr Val Ala Leu Ala Ser Gly Thr Leu Ser Val Leu Leu His  
1170 1175 1180

Cys Glu Ala Ile Gly His Pro Arg Pro Thr Ile Ser Trp Ala Arg Asn  
1185 1190 1195 1200

Gly Glu Glu Val Gln Phe Ser Asp Arg Ile Leu Leu Gln Pro Asp Asp  
1205 1210 1215

Ser Leu Gln Ile Leu Ala Pro Val Glu Ala Asp Val Gly Phe Tyr Thr  
1220 1225 1230

Cys Asn Ala Thr Asn Ala Leu Gly Tyr Asp Ser Val Ser Ile Ala Val  
1235 1240 1245

Thr Leu Ala Gly Lys Pro Leu Val Lys Thr Ser Arg Met Thr Val Ile  
1250 1255 1260

Asn Thr Glu Lys Pro Ala Val Thr Val Asp Ile Gly Ser Thr Ile Lys  
1265 1270 1275 1280

Thr Val Gln Gly Val Asn Val Thr Ile Asn Cys Gln Val Ala Gly Val  
1285 1290 1295

Pro Glu Ala Glu Val Thr Trp Phe Arg Asn Lys Ser Lys Leu Gly Ser  
1300 1305 1310

Pro His His Leu His Glu Gly Ser Leu Leu Leu Thr Asn Val Ser Ser  
1315 1320 1325

Ser Asp Gln Gly Leu Tyr Ser Cys Arg Ala Ala Asn Leu His Gly Glu  
1330 1335 1340

Leu Thr Glu Ser Thr Gln Leu Leu Ile Leu Asp Pro Pro Gln Val Pro  
1345 1350 1355 1360

Thr Gln Leu Glu Asp Ile Arg Ala Leu Leu Ala Ala Thr Gly Pro Asn  
1365 1370 1375

Leu Pro Ser Val Leu Thr Ser Pro Leu Gly Thr Gln Leu Val Leu Asp  
1380 1385 1390

Pro Gly Asn Ser Ala Leu Leu Gly Cys Pro Ile Lys Gly His Pro Val  
1395 1400 1405

Pro Asn Ile Thr Trp Phe His Gly Gly Gln Pro Ile Val Thr Ala Thr  
1410 1415 1420

Gly Leu Thr His His Ile Leu Ala Ala Gly Gln Ile Leu Gln Val Ala  
1425 1430 1435 1440

Asn Leu Ser Gly Gly Ser Gln Gly Glu Phe Ser Cys Leu Ala Gln Asn  
1445 1450 1455

Glu Ala Gly Val Leu Met Gln Lys Ala Ser Leu Val Ile Gln Asp Tyr  
1460 1465 1470

Trp Trp Ser Val Asp Arg Leu Ala Thr Cys Ser Ala Ser Cys Gly Asn  
1475 1480 1485

Arg Gly Val Gln Gln Pro Arg Leu Arg Cys Leu Leu Asn Ser Thr Glu  
1490 1495 1500

Val Asn Pro Ala His Cys Ala Gly Lys Val Arg Pro Ala Val Gln Pro  
1505 1510 1515 1520

Ile Ala Cys Asn Arg Arg Asp Cys Pro Ser Arg Trp Met Val Thr Ser  
1525 1530 1535

Trp Ser Ala Cys Thr Arg Ser Cys Gly Gly Gly Val Gln Thr Arg Arg  
1540 1545 1550

Val Thr Cys Gln Lys Leu Lys Ala Ser Gly Ile Ser Thr Pro Val Ser  
1555 1560 1565

Asn Asp Met Cys Thr Gln Val Ala Lys Arg Pro Val Asp Thr Gln Ala  
1570 1575 1580

Cys Asn Gln Gln Leu Cys Val Glu Trp Ala Phe Ser Ser Trp Gly Gln  
1585 1590 1595 1600

Cys Asn Gly Pro Cys Ile Gly Pro His Leu Ala Val Gln His Arg Gln  
1605 1610 1615

Val Phe Cys Gln Thr Arg Asp Gly Ile Thr Leu Pro Ser Glu Gln Cys  
1620 1625 1630

Ser Ala Leu Pro Arg Pro Val Ser Thr Gln Asn Cys Trp Ser Glu Ala  
1635 1640 1645

Cys Ser Val His Trp Arg Val Ser Leu Trp Thr Leu Cys Thr Ala Thr  
1650 1655 1660

Cys Gly Asn Tyr Gly Phe Gln Ser Arg Arg Val Glu Cys Val His Ala  
1665 1670 1675 1680

Arg Thr Asn Lys Ala Val Pro Glu His Leu Cys Ser Trp Gly Pro Arg  
1685 1690 1695

Pro Ala Asn Trp Gln Arg Cys Asn Ile Thr Pro Cys Glu Asn Met Glu  
1700 1705 1710

Cys Arg Asp Thr Thr Arg Tyr Cys Glu Lys Val Lys Gln Leu Lys Leu  
1715 1720 1725

Cys Gln Leu Ser Gln Phe Lys Ser Arg Cys Cys Gly Thr Cys Gly Lys  
1730 1735 1740

Ala  
1745

<210> 2223  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 2223  
Glu Cys Cys Glu Thr Ala Ala Pro Pro Gly Pro His Arg Arg Pro Glu  
1 5 10 15

Ser Gly Gln

<210> 2224  
<211> 363  
<212> PRT  
<213> Homo sapiens

<400> 2224  
Met Ala Ala Val Leu Thr Trp Ala Leu Ala Leu Ser Ala Phe Ser  
1 5 10 15

Ala Thr Gln Ala Arg Lys Gly Phe Trp Asp Tyr Phe Ser Gln Thr Ser  
20 25 30

Gly Asp Lys Gly Arg Val Glu Gln Ile His Gln Gln Lys Met Ala Arg  
35 40 45

Glu Pro Ala Thr Leu Lys Asp Ser Leu Glu Gln Asp Leu Asn Asn Met  
50 55 60

Asn Lys Phe Leu Glu Lys Leu Arg Pro Leu Ser Gly Ser Glu Ala Pro  
65 70 75 80

Arg Leu Pro Gln Asp Pro Val Gly Met Arg Arg Gln Leu Gln Glu Glu  
85 90 95

Leu Glu Glu Val Lys Ala Arg Leu Gln Pro Tyr Met Ala Glu Ala His  
100 105 110

Glu Leu Val Gly Trp Asn Leu Glu Gly Leu Arg Gln Gln Leu Lys Pro  
115 120 125

Tyr Thr Met Asp Leu Met Glu Gln Val Ala Leu Arg Val Gln Glu Leu  
130 135 140

Gln Glu Gln Leu Arg Val Val Gly Glu Asp Thr Lys Ala Gln Leu Leu  
145 150 155 160

Gly Gly Val Asp Glu Ala Trp Ala Leu Leu Gln Gly Leu Gln Ser Arg  
165 170 175

Val Val His His Thr Gly Arg Phe Lys Glu Leu Phe His Pro Tyr Ala  
180 185 190

Glu Ser Leu Val Ser Gly Ile Gly Arg His Val Gln Glu Leu His Arg  
195 200 205

Ser Val Ala Pro His Ala Pro Ala Ser Pro Ala Arg Leu Ser Arg Cys  
210 215 220

Val Gln Val Leu Ser Arg Lys Leu Thr Leu Lys Ala Lys Ala Leu His  
225 230 235 240

Ala Arg Ile Gln Gln Asn Leu Asp Gln Leu Arg Glu Glu Leu Ile Arg  
245 250 255

Ala Phe Ala Gly Thr Gly Thr Glu Glu Gly Ala Gly Pro Asp Pro Gln  
260 265 270

Met Leu Ser Glu Glu Val Arg Gln Arg Leu Gln Ala Phe Arg Gln Asp  
275 280 285

Thr Tyr Leu Gln Ile Ala Ala Phe Thr Arg Ala Ile Asp Gln Glu Thr  
290 295 300

Glu Glu Val Gln Gln Gln Leu Ala Pro Pro Pro Gly His Ser Ala  
305 310 315 320

Phe Ala Pro Glu Phe Gln Gln Thr Asp Ser Gly Lys Val Leu Ser Lys  
325 330 335

Leu Gln Ala Arg Leu Asp Asp Leu Trp Glu Asp Ile Thr His Ser Leu  
 340 345 350

His Asp Gln Gly His Ser His Leu Gly Asp Pro  
 355 360

<210> 2225  
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 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (86)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (146)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2225  
 Met Ala Val Gly Lys Phe Leu Leu Gly Ser Leu Leu Leu Ser Leu  
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Gln Leu Gly Gln Gly Trp Gly Pro Asp Ala Arg Gly Val Pro Val Ala  
 20 25 30

Asp Gly Glu Phe Ser Ser Glu Gln Val Ala Lys Ala Gly Gly Thr Trp  
 35 40 45

Leu Gly Lys Asp Phe Gln Gly Pro Ser Val Thr Ser Gln Leu Ser Pro  
 50 55 60

Ala Leu Thr Leu Leu Thr Val Ser Ala Leu Pro Ser His Arg His Pro  
 65 70 75 80

Pro Pro Pro Cys Pro Xaa Ala Pro Ser Pro Val Trp Ser Met Pro Ala  
 85 90 95

Val Glu Pro Asp Pro Val Arg Gly Arg Ala Arg Pro Gly Leu Arg Leu  
 100 105 110

Ile Gly Glu Val Ile Phe Arg Tyr Cys Ala Gly Ser Cys Pro Arg Gly  
 115 120 125

Ala Arg Thr Gln His Gly Leu Ala Leu Ala Arg Leu Gln Gly Gln Gly  
 130 135 140

Arg Xaa His Gly Gly Pro Cys Cys Arg Pro Thr Arg Tyr Thr Asp Val  
 145 150 155 160

Ala Phe Leu Asp Asp Arg His Ala Gly Ser Gly Cys Pro Ser Ser Arg  
 165 170 175

Arg Leu Cys Gly Cys Gly Gly  
 180

<210> 2226  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
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 <222> (86)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (116)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<220>  
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 <222> (146)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 2226  
 Met Ala Val Gly Lys Phe Leu Leu Gly Ser Leu Leu Leu Leu Ser Leu  
           1                  5                  10                  15  
 Gln Leu Gly Gln Gly Trp Gly Pro Asp Ala Arg Gly Val Pro Val Ala  
                   20                  25                  30  
 Asp Gly Glu Phe Ser Ser Glu Gln Val Ala Lys Ala Gly Gly Thr Trp  
                   35                  40                  45  
 Leu Gly Lys Asp Phe Gln Gly Pro Ser Val Thr Ser Gln Leu Ser Pro  
           50                  55                  60  
 Ala Leu Thr Leu Leu Thr Val Ser Ala Leu Pro Ser His Arg His Pro  
           65                  70                  75                  80  
 Pro Pro Pro Cys Pro Xaa Ala Pro Ser Pro Val Trp Ser Met Pro Ala  
                   85                  90                  95  
 Val Glu Pro Asp Pro Val Arg Gly Arg Ala Arg Pro Gly Leu Arg Leu  
                   100                  105                  110  
 Ile Gly Glu Xaa His Leu Pro Leu Leu Arg Arg Gln Leu Pro Pro Trp  
           115                  120                  125  
 Cys Pro His Pro Ala Trp Xaa Gly Ala Gly Pro Ala Ala Gly Pro Gly  
           130                  135                  140  
 Pro Xaa Pro Arg Arg Ala Leu Leu Pro Ala His Ser Leu His Arg Arg  
           145                  150                  155                  160  
 Gly Leu Pro Arg Arg Pro Pro Arg Trp Gln Arg Leu Pro Gln Leu Ser  
                                   1491

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165

170

175

Ala Ala Leu Arg Leu Trp Trp Leu Arg Val Pro Gly Leu Ala Pro Arg  
 180 185 190  
 Ser Cys Ser Ala Gly Gly Ala Arg Leu Thr Tyr Leu Leu Glu Thr Trp  
 195 200 205  
 Met Gln Arg Gln Arg Gly Gly Glu Trp Ala Gly Ala Thr Ser Ser Glu  
 210 215 220  
 Cys Asn Lys Gly His His Ser Pro Gly Lys Lys Lys Lys Lys Lys Lys  
 225 230 235 240  
 Lys Lys Lys Lys Lys Leu Glu Gly Gly Ser Arg Tyr  
 245 250

<210> 2227

<211> 150

<212> PRT

<213> Homo sapiens

<400> 2227

Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val  
 1 5 10 15  
 Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr  
 20 25 30  
 Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser  
 35 40 45  
 Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp  
 50 55 60  
 Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln  
 65 70 75 80  
 Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn  
 85 90 95  
 Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn  
 100 105 110  
 Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys  
 115 120 125  
 Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro  
 130 135 140  
 Ile Ser Ile Met Ile Cys  
 145 150

<210> 2228

<211> 125

<212> PRT



Figure 1 is a schematic representation of the experimental design. It is divided into two main sections: 'Pretest' and 'Main Experiment'. The 'Pretest' section includes a 'Pretest' box with 'Pretest' and 'Pretest' labels, and a 'Pretest' box with 'Pretest' and 'Pretest' labels. The 'Main Experiment' section includes a 'Main Experiment' box with 'Main Experiment' and 'Main Experiment' labels, and a 'Main Experiment' box with 'Main Experiment' and 'Main Experiment' labels.

Met Ile Pro Phe Pro Ala Cys Leu Leu Leu Ala Leu Phe Pro Lys Val  
1 5 10 15

Pro Ala Arg Ser Gln Ile Asn Leu Pro Val Glu Ser Gly Ser Ala Leu  
35 40 45

Leu Glu Pro Arg Gly Lys Gly Arg Val Glu Arg Val Cys Pro Val Ala  
50 55 60

Trp Ser Ser Met Val Ala Ser Cys Leu Pro Ser Pro Ser Ser Gly Gly  
65 70 75 80

Pro Glu Gly Ser Leu Gly Thr Val Pro Gln Ile Leu Thr Gln Gly Pro  
85 90 95

Ala Trp Gly Arg Asp Gly Cys Arg Gln Asn Ala Leu Tyr Arg Asp Phe  
100 105 110

Leu Leu Leu Gly Arg Cys Val Ser Pro Thr Ile Cys Leu  
115 120 125

<211> 766

<213> Hom

Met Ile Trp Arg Ser Arg Ala Gly Ala Glu Leu Phe Ser Leu Met Ala  
1 5 10 15

Leu Trp Glu Trp Ile Ala Leu Ser Leu His Cys Trp Val Leu Ala Val  
20 25 30

Ala Ala Val Ser Asp Gln His Ala Thr Ser Pro Phe Asp Trp Leu Leu  
35 40 45

Ser Asp Lys Gly Pro Phe His Arg Ser Gln Glu Tyr Thr Asp Phe Val  
50 55 60

Asp Arg Ser Arg Gln Gly Phe Ser Thr Arg Tyr Lys Ile Tyr Arg Glu  
65 70 75 80

Phe Gly Arg Trp Lys Val Asn Asn Leu Ala Val Glu Arg Arg Asn Phe  
85 90 95

Leu Gly Ser Pro Leu Pro Leu Ala Pro Glu Phe Phe Arg Asn Ile Arg  
100 105 110

Leu Leu Gly Arg Arg Pro Thr Leu Gln Gln Ile Thr Glu Asn Leu Ile  
115 120 125

Lys Lys Tyr Gly Thr His Phe Leu Leu Ser Ala Thr Leu Gly Gly Glu

130					135					140					
Glu	Ser	Leu	Thr	Ile	Phe	Val	Asp	Lys	Arg	Lys	Leu	Ser	Lys	Arg	Ala
145					150					155					160
Glu	Gly	Ser	Asp	Ser	Thr	Thr	Asn	Ser	Ser	Ser	Val	Thr	Leu	Glu	Thr
				165					170					175	
Leu	His	Gln	Leu	Ala	Ala	Ser	Tyr	Phe	Ile	Asp	Arg	Asp	Ser	Thr	Leu
			180					185					190		
Arg	Arg	Leu	His	His	Ile	Gln	Ile	Ala	Ser	Thr	Ala	Ile	Lys	Val	Thr
		195					200					205			
Glu	Thr	Arg	Thr	Gly	Pro	Leu	Gly	Cys	Ser	Asn	Tyr	Asp	Asn	Leu	Asp
	210					215					220				
Ser	Val	Ser	Ser	Val	Leu	Val	Gln	Ser	Pro	Glu	Asn	Lys	Ile	Gln	Leu
225					230					235					240
Gln	Gly	Leu	Gln	Val	Leu	Leu	Pro	Asp	Tyr	Leu	Gln	Glu	Arg	Phe	Val
				245				250						255	
Gln	Ala	Ala	Leu	Ser	Tyr	Ile	Ala	Cys	Asn	Ser	Glu	Gly	Glu	Phe	Ile
			260					265					270		
Cys	Lys	Glu	Asn	Asp	Cys	Trp	Cys	His	Cys	Gly	Pro	Lys	Phe	Pro	Glu
		275					280					285			
Cys	Asn	Cys	Pro	Ser	Met	Asp	Ile	Gln	Ala	Met	Glu	Glu	Asn	Leu	Leu
		290				295					300				
Arg	Ile	Thr	Glu	Thr	Trp	Lys	Ala	Tyr	Asn	Ser	Asp	Phe	Glu	Glu	Ser
305					310					315					320
Asp	Glu	Phe	Lys	Leu	Phe	Met	Lys	Arg	Leu	Pro	Met	Asn	Tyr	Phe	Leu
				325					330					335	
Asn	Thr	Ser	Thr	Ile	Met	His	Leu	Trp	Thr	Met	Asp	Ser	Asn	Phe	Gln
			340					345					350		
Arg	Arg	Tyr	Glu	Gln	Leu	Glu	Asn	Ser	Met	Lys	Gln	Leu	Phe	Leu	Lys
		355					360					365			
Ala	Gln	Lys	Ile	Val	His	Lys	Leu	Phe	Ser	Leu	Ser	Lys	Arg	Cys	His
		370				375					380				
Lys	Gln	Pro	Leu	Ile	Ser	Leu	Pro	Arg	Gln	Arg	Thr	Ser	Thr	Tyr	Trp
385					390					395					400
Leu	Thr	Arg	Ile	Gln	Ser	Phe	Leu	Tyr	Cys	Asn	Glu	Asn	Gly	Leu	Leu
				405				410						415	
Gly	Ser	Phe	Ser	Glu	Glu	Thr	His	Ser	Cys	Thr	Cys	Pro	Asn	Asp	Gln
			420					425					430		
Val	Val	Cys	Thr	Ala	Phe	Leu	Pro	Cys	Thr	Val	Gly	Asp	Ala	Ser	Ala
		435					440					445			
Cys	Leu	Thr	Cys	Ala	Pro	Asp	Asn	Arg	Thr	Arg	Cys	Gly	Thr	Cys	Asn

450	455	460
Thr Gly Tyr Met Leu Ser Gln Gly Leu Cys Lys Pro Glu Val Ala Glu 465	470	475 480
Ser Thr Asp His Tyr Ile Gly Phe Glu Thr Asp Leu Gln Asp Leu Glu 485	490	495
Met Lys Tyr Leu Leu Gln Lys Thr Asp Arg Arg Ile Glu Val His Ala 500	505	510
Ile Phe Ile Ser Asn Asp Met Arg Leu Asn Ser Trp Phe Asp Pro Ser 515	520	525
Trp Arg Lys Arg Met Leu Leu Thr Leu Lys Ser Asn Lys Tyr Lys Ser 530	535	540
Ser Leu Val His Met Ile Leu Gly Leu Ser Leu Gln Ile Cys Leu Thr 545	550	555 560
Lys Asn Ser Thr Leu Glu Pro Val Leu Ala Val Tyr Val Asn Pro Phe 565	570	575
Gly Gly Ser His Ser Glu Ser Trp Phe Met Pro Val Asn Glu Asn Ser 580	585	590
Phe Pro Asp Trp Glu Arg Thr Lys Leu Asp Leu Pro Leu Gln Cys Tyr 595	600	605
Asn Trp Thr Leu Thr Leu Gly Asn Lys Trp Lys Thr Phe Phe Glu Thr 610	615	620
Val His Ile Tyr Leu Arg Ser Arg Ile Lys Ser Asn Gly Pro Asn Gly 625	630	635 640
Asn Glu Ser Ile Tyr Tyr Glu Pro Leu Glu Phe Ile Asp Pro Ser Arg 645	650	655
Asn Leu Gly Tyr Met Lys Ile Asn Asn Ile Gln Val Phe Gly Tyr Ser 660	665	670
Met His Phe Asp Pro Glu Ala Ile Arg Asp Leu Ile Leu Gln Leu Asp 675	680	685
Tyr Pro Tyr Thr Gln Gly Ser Gln Asp Ser Ala Leu Leu Gln Leu Leu 690	695	700
Glu Ile Arg Asp Arg Val Asn Lys Leu Ser Pro Pro Gly Gln Arg Arg 705	710	715 720
Leu Asp Leu Phe Ser Cys Leu Leu Arg His Arg Leu Lys Leu Ser Thr 725	730	735
Ser Glu Val Val Arg Ile Gln Ser Ala Leu Gln Ala Phe Asn Ala Lys 740	745	750
Leu Pro Asn Thr Met Asp Tyr Asp Thr Thr Lys Leu Cys Ser 755	760	765



Parameter	Control		Forsk		Forsk + 10 <sup>-6</sup> M		Forsk + 10 <sup>-5</sup> M		Forsk + 10 <sup>-4</sup> M		Forsk + 10 <sup>-3</sup> M	
	Value	SE	Value	SE	Value	SE	Value	SE	Value	SE	Value	SE
Basal release	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
First pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Second pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Third pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fourth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fifth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sixth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventh pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eighth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ninth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eleventh pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twelfth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thirteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fourteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fifteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sixteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seventeenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eighteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nineteenth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twentieth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-first pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-second pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-third pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-fourth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-fifth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-sixth pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-seventh pulse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Twenty-eighth pulse	0.00	0.00	0.00	0.00								

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<210> 2233
<211> 298
<212> PRT
<213> Homo sapiens
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Met	Lys	Thr	Leu	Gln	Ser	Thr	Leu	Leu	Leu	Leu	Val	Pro	Leu		
1				5				10				15			
Ile	Lys	Pro	Ala	Pro	Pro	Thr	Gln	Gln	Asp	Ser	Arg	Ile	Ile	Tyr	Asp
			20					25					30		
Tyr	Gly	Thr	Asp	Asn	Phe	Glu	Glu	Ser	Ile	Phe	Ser	Gln	Asp	Tyr	Glu
		35					40					45			
Asp	Lys	Tyr	Leu	Asp	Gly	Lys	Asn	Ile	Lys	Glu	Lys	Glu	Thr	Val	Ile
	50					55					60				
Ile	Pro	Asn	Glu	Lys	Ser	Leu	Gln	Leu	Gln	Lys	Asp	Glu	Ala	Ile	Thr
65					70					75					80
Pro	Leu	Pro	Pro	Lys	Lys	Glu	Asn	Asp	Glu	Met	Pro	Thr	Cys	Leu	Leu
				85					90					95	
Cys	Val	Cys	Leu	Ser	Gly	Ser	Val	Tyr	Cys	Glu	Glu	Val	Asp	Ile	Asp
			100					105					110		
Ala	Val	Pro	Pro	Leu	Pro	Lys	Glu	Ser	Ala	Tyr	Leu	Tyr	Ala	Arg	Phe
		115					120					125			

Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn  
 130 135 140

Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp  
 145 150 155 160

Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu  
 165 170 175

Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe  
 180 185 190

Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala  
 195 200 205

Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala  
 210 215 220

Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His  
 225 230 235 240

Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys  
 245 250 255

Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu  
 260 265 270

Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys  
 275 280 285

Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe  
 290 295

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Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala  
 20 25 30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala  
 35 40 45

Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp  
 50 55 60

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp  
 65 70 75 80

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly  
 85 90 95

Arg Leu Arg Asp Val Ala Ala Ser Tyr Leu Asp Cys Gly Ala Thr Arg  
 100 105 110

Ala Cys Gly Pro Leu Leu Cys Ala Thr Leu Pro Val Ser Leu Phe Lys  
 115 120 125

Asn Ile Asp Asp Thr Leu Lys Cys Val Asn Val Leu Lys Ser Tyr Ser  
 130 135 140

Phe Gln Gln Pro Lys Ala Thr Val Val Leu Ala Arg Arg Ser  
 145 150 155

<210> 2235  
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 <212> PRT  
 <213> Homo sapiens

<400> 2235  
 Met Thr Lys Ala Leu Ile Pro Thr Pro Phe Phe Leu Ala Ala Met Trp  
 1 5 10 15

Pro Leu Trp Gln His Ser Trp Ala Gln Thr Leu Arg Ser Gln Arg Gln  
 20 25 30

Glu Ala Asp Ala Trp Ala Lys Ala Gly Ala Gly Asn Ser Arg Gly Ser  
 35 40 45

Leu Ala Trp Arg Leu Leu Met Ser Ser Gly  
 50 55

<210> 2236  
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 <212> PRT  
 <213> Homo sapiens

<400> 2236  
 Met Leu Val Ala Ala Ile Val Phe Ile Ser Phe Gly Val Val Ala Ala  
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Phe Cys Cys Ala Ile Val Asp Gly Val Phe Ala Ala Gln His Ile Glu  
 20 25 30

Pro Lys Ala Pro His His Gly Lys Met Pro Val Tyr Ser Ser Gly Val  
 35 40 45

Gly Tyr Leu Tyr Asp Val Tyr Gln Thr Glu Val Ser Arg Ser Thr Glu  
 50 55 60

Ile His Val Gly Leu Leu Asn  
 65 70

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 <212> PRT

<213> Homo sapiens

<400> 2237

Met Gly Arg Leu Leu Arg Ala Ala Arg Leu Pro Pro Leu Leu Ser Pro  
1 5 10 15  
Leu Leu Leu Leu Val Gly Gly Ala Phe Leu Gly Ala Cys Val Ala  
20 25 30  
Gly Ser Asp Glu Pro Gly Pro Glu Gly Leu Thr Ser Thr Ser Leu Leu  
35 40 45  
Asp Leu Leu Leu Pro Thr Gly Leu Glu Pro Leu Asp Ser Glu Glu Pro  
50 55 60  
Ser Glu Thr Met Gly Leu Gly Ala Gly Leu Gly Ala Pro Gly Ser Gly  
65 70 75 80  
Phe Pro Ser Glu Glu Asn Glu Glu Ser Arg Ile Leu Gln Pro Pro Gln  
85 90 95  
Tyr Phe Trp Glu Glu Glu Glu Glu Leu Asn Asp Ser Ser Leu Asp Leu  
100 105 110  
Gly Pro Thr Ala Asp Tyr Val Phe Pro Asp Leu Thr Glu Lys Ala Gly  
115 120 125  
Ser Ile Glu Asp Thr Ser Gln Ala Gln Glu Leu Pro Asn Leu Pro Ser  
130 135 140  
Pro Leu Pro Lys Met Asn Leu Val Glu Pro Pro Trp His Met Pro Pro  
145 150 155 160  
Arg Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Arg Glu Lys Glu  
165 170 175  
Glu Val Glu Lys Gln Glu Glu Glu Glu Glu Glu Glu Leu Leu Pro Val  
180 185 190  
Asn Gly Ser Gln Glu Glu Ala Lys Pro Gln Val Arg Asp Phe Ser Leu  
195 200 205  
Thr Ser Ser Ser Gln Thr Pro Gly Ala Thr Lys Ser Arg His Glu Asp  
210 215 220  
Ser Gly Asp Gln Ala Ser Ser Gly Val Glu Val Glu Ser Ser Met Gly  
225 230 235 240  
Pro Ser Leu Leu Leu Pro Ser Val Thr Pro Thr Thr Val Thr Pro Gly  
245 250 255  
Asp Gln Asp Ser Thr Ser Gln Glu Ala Glu Ala Thr Val Leu Pro Ala  
260 265 270  
Ala Gly Leu Gly Val Glu Phe Glu Ala Pro Gln Glu Ala Ser Glu Glu  
275 280 285  
Ala Thr Ala Gly Ala Ala Gly Leu Ser Gly Gln His Glu Glu Val Pro  
290 295 300

1500

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Ala Leu Pro Ser Phe Pro Gln Thr Thr Ala Pro Ser Gly Ala Glu His  
305 310 315 320

Pro Asp Glu Asp Pro Leu Gly Ser Arg Thr Ser Ala Ser Ser Pro Leu  
325 330 335

Ala Pro Gly Asp Met Glu Leu Thr Pro Ser Ser Ala Thr Leu Gly Gln  
340 345 350

Glu Asp Leu Asn Gln Gln Leu Leu Glu Gly Gln Ala Ala Glu Ala Gln  
355 360 365

Ser Arg Ile Pro Trp Asp Ser Thr Gln Val Ile Cys Lys Asp Trp Ser  
370 375 380

Asn Leu Ala Gly Lys Asn Tyr Ile Ile Leu Asn Met Thr Glu Asn Ile  
385 390 395 400

Asp Cys Glu Val Phe Arg Gln His Arg Gly Pro Gln Leu Leu Ala Leu  
405 410 415

Val Glu Glu Val Leu Pro Arg His Gly Ser Gly His His Gly Ala Trp  
420 425 430

His Ile Ser Leu Ser Lys Pro Ser Glu Lys Glu Gln His Leu Leu Met  
435 440 445

Thr Leu Val Gly Glu Gln Gly Val Val Pro Thr Gln Asp Val Leu Ser  
450 455 460

Met Leu Gly Asp Ile Arg Arg Ser Leu Glu Glu Ile Gly Ile Gln Asn  
465 470 475 480

Tyr Ser Thr Thr Ser Ser Cys Gln Ala Arg Ala Ser Gln Val Arg Ser  
485 490 495

Asp Tyr Gly Thr Leu Phe Val Val Leu Val Val Ile Gly Ala Ile Cys  
500 505 510

Ile Ile Ile Ile Ala Leu Gly Leu Leu Tyr Asn Cys Trp Gln Arg Arg  
515 520 525

Leu Pro Lys Leu Lys His Val Ser His Gly Glu Glu Leu Arg Phe Val  
530 535 540

Glu Asn Gly Cys His Asp Asn Pro Thr Leu Asp Val Ala Ser Asp Ser  
545 550 555 560

Gln Ser Glu Met Gln Glu Lys His Pro Ser Leu Asn Gly Gly Gly Ala  
565 570 575

Leu Asn Gly Pro Gly Ser Trp Gly Ala Leu Met Gly Gly Lys Arg Asp  
580 585 590

Pro Glu Asp Ser Asp Val Phe Glu Glu Asp Thr His Leu  
595 600 605

<210> 2238

<211> 432  
<212> PRT  
<213> Homo sapiens

<400> 2238

Met Asp Ala Arg Trp Trp Ala Val Val Val Leu Ala Ala Phe Pro Ser  
1 5 10 15  
Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr  
20 25 30  
Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser  
35 40 45  
Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe Arg Arg Lys Asn  
50 55 60  
Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu Val Lys Ala Cys  
65 70 75 80  
Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro  
85 90 95  
Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu  
100 105 110  
Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val  
115 120 125  
Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser  
130 135 140  
Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg  
145 150 155 160  
Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln  
165 170 175  
Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe Ala Ser Leu Ser  
180 185 190  
Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu Lys Phe Val Ser  
195 200 205  
Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val Ile Pro Val Met  
210 215 220  
Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu His Trp Glu Tyr  
225 230 235 240  
Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met Phe Leu Leu Ser  
245 250 255  
Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr Leu Ser Gly Leu  
260 265 270  
Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe Thr Ser Asn Trp  
275 280 285  
Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val Gln Met Met Phe

1502

003345 044201



Leu	Gln	Glu	Arg	Val	Met	Thr	Arg	Ser	Tyr	Gly	Ala	Thr	Ala	Thr	Ser	
130						135					140					
Pro	Gly	Glu	Arg	Phe	Thr	Asp	Ser	Gln	Phe	Leu	Val	Leu	Met	Asn	Arg	
145					150					155					160	
Val	Leu	Ala	Leu	Ile	Val	Ala	Gly	Leu	Ser	Cys	Val	Leu	Cys	Lys	Gln	
				165					170					175		
Pro	Arg	His	Gly	Ala	Pro	Met	Tyr	Arg	Tyr	Ser	Phe	Ala	Ser	Leu	Ser	
			180					185					190			
Asn	Val	Leu	Ser	Ser	Trp	Cys	Gln	Tyr	Glu	Ala	Leu	Lys	Phe	Val	Ser	
		195					200					205				
Phe	Pro	Thr	Gln	Val	Leu	Ala	Lys	Ala	Ser	Lys	Val	Ile	Pro	Val	Met	
		210				215					220					
Leu	Met	Gly	Lys	Leu	Val	Ser	Arg	Arg	Ser	Tyr	Glu	His	Trp	Glu	Tyr	
225					230					235					240	
Leu	Thr	Ala	Thr	Leu	Ile	Ser	Ile	Gly	Val	Ser	Met	Phe	Leu	Leu	Ser	
				245					250					255		
Ser	Gly	Pro	Glu	Pro	Arg	Ser	Ser	Pro	Ala	Thr	Thr	Leu	Ser	Gly	Leu	
			260					265						270		
Ile	Leu	Leu	Ala	Gly	Tyr	Ile	Ala	Phe	Asp	Ser	Phe	Thr	Ser	Asn	Trp	
		275					280					285				
Gln	Asp	Ala	Leu	Phe	Ala	Tyr	Lys	Met	Ser	Ser	Val	Gln	Met	Met	Phe	
		290					295				300					
Gly	Val	Asn	Phe	Phe	Ser	Cys	Leu	Phe	Thr	Val	Gly	Ser	Leu	Leu	Glu	
305					310					315					320	
Gln	Gly	Ala	Leu	Leu	Glu	Gly	Thr	Arg	Phe	Met	Gly	Arg	His	Ser	Glu	
				325					330					335		
Phe	Ala	Ala	His	Ala	Leu	Leu	Leu	Ser	Ile	Cys	Ser	Ala	Cys	Gly	Gln	
			340					345					350			
Leu	Phe	Ile	Phe	Tyr	Thr	Ile	Gly	Gln	Phe	Gly	Ala	Ala	Val	Phe	Thr	
		355					360					365				
Ile	Ile	Met	Thr	Leu	Arg	Gln	Ala	Phe	Ala	Ile	Leu	Leu	Ser	Cys	Leu	
		370				375					380					
Leu	Tyr	Gly	His	Thr	Val	Thr	Val	Val	Gly	Gly	Leu	Gly	Val	Ala	Val	
385					390					395					400	
Val	Phe	Ala	Ala	Leu	Leu	Leu	Arg	Val	Tyr	Ala	Arg	Gly	Arg	Leu	Lys	
				405					410					415		
Gln	Arg	Gly	Lys	Lys	Ala	Val	Pro	Val	Glu	Ser	Pro	Val	Gln	Lys	Val	
			420					425					430			

<210> 2240  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 2240  
 Met Lys Ala Val Val Leu Leu Lys Ala Phe Ser Phe Ser Leu Cys Ser  
   1                  5                  10                  15  
 Ala Ile Ser Pro Val Thr Pro Gly Phe Arg Gln Thr Ile Asn Val Leu  
                   20                  25                  30  
 Asp Thr Val Ala Phe Ser Ala Phe Phe Ile Tyr Leu Phe Thr Val Thr  
           35                  40                  45  
 Ala Ser Ile Asn Phe Tyr Ala Tyr Phe Ser Ser Phe Leu Ala Gly Ala  
       50                  55                  60  
 Pro Phe Ile Lys Ile  
   65

<210> 2241  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 2241  
 Met Leu Asp Leu Ser Pro Ser Leu Thr Leu Lys Phe Cys Phe Leu His  
   1                  5                  10                  15  
 Leu Val Phe Leu Pro Phe Lys Val Tyr Cys Gln Leu Leu Gln Glu Leu  
           20                  25                  30  
 Leu Ser Lys Pro Val Ser Lys Leu Pro Leu Thr Pro Gln Cys Gln Ser  
       35                  40                  45  
 Trp Ala Arg Pro Leu Gly Asp Leu Glu  
       50                  55

<210> 2242  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2242  
 Met Leu Arg Thr Leu Val Leu Lys Gln Thr Leu Asp Leu Leu Leu Pro  
   1                  5                  10                  15  
 Leu Leu Glu Ala Leu Leu Val Leu Gly Val Pro Gln His Leu Glu Leu  
           20                  25                  30  
 Gln Pro Leu Pro Val Gln Val Ser Leu Leu Leu Leu Gln Leu Leu Asp  
       35                  40                  45

Figure 1 consists of 12 bar charts, labeled (a) through (l), arranged in a 6x2 grid. Each chart shows the percentage of total protein in various fractions (A, B, C, D, E, F, G, H, I, J, K, L) for different protein types (A, B, C, D, E, F, G, H, I, J, K, L) under different conditions (Control, 100, 200, 400, 800, 1600, 3200, 6400, 12800, 25600, 51200, 102400). The y-axis represents the percentage of total protein, and the x-axis represents the protein type. The legend indicates that the bars represent the percentage of total protein in each fraction.

<400> 2243

<210> 2244

<211> 86

<212> PRT

<213> Homo sapiens

<400> 2244

1506

35

40

45

Gln Pro Cys Leu Phe Leu Pro Thr Thr Thr Gly Leu Ser Ser Gly Tyr  
50 55 60

His Thr Phe Leu Ser Gly Leu His Ser Cys His Ile Ser Phe Ala Thr  
65 70 75 80

Ala Ile Pro Gly Cys Leu  
85

<210> 2245

<211> 208

<212> PRT

<213> Homo sapiens

<400> 2245

Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr  
1 5 10 15

Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met  
20 25 30

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser  
35 40 45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn  
50 55 60

Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp  
65 70 75 80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn  
85 90 95

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu  
100 105 110

Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile  
115 120 125

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala  
130 135 140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys  
145 150 155 160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr  
165 170 175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser  
180 185 190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile  
195 200 205

<210> 2246  
 <211> 215  
 <212> PRT  
 <213> Homo sapiens

<400> 2246

Met	Arg	Leu	Pro	Ala	Trp	Cys	Arg	His	Thr	Thr	Leu	Ala	Ile	Ser	Cys
1				5					10					15	
Trp	His	Cys	Leu	Val	Leu	Ala	Arg	Ala	Ser	Ala	Asp	Ser	Ala	Ser	Leu
			20				25						30		
Pro	Thr	Ile	Ser	His	Leu	Gly	Val	Lys	Pro	Leu	Ser	Val	Gly	Trp	Gly
		35					40					45			
Ala	Pro	Ser	Thr	Leu	Pro	Val	Ser	Pro	Cys	Gly	Gly	Lys	Pro	Ala	Ala
	50					55					60				
Pro	Thr	Ser	Ala	Ser	Pro	Ala	Ala	Ala	Pro	Leu	Arg	Phe	Trp	Arg	Pro
	65				70					75					80
Gly	Ala	Ser	Gly	Gly	Gly	Ala	Gly	Gly	Thr	Arg	Arg	Leu	Ala	Leu	Cys
				85					90					95	
Arg	Leu	Val	Thr	Ala	Arg	Thr	Thr	Leu	Ala	Thr	Gly	Thr	Pro	Gly	Leu
			100					105					110		
Ser	Ala	Arg	Pro	Arg	Gln	Arg	Pro	Cys	Leu	Leu	Pro	Val	Leu	Pro	Arg
		115					120					125			
Arg	Pro	Ala	Glu	Leu	Ser	Val	Ser	Leu	Glu	Pro	Ser	Pro	Gly	Ser	Ser
	130					135					140				
Gly	Arg	Gly	Phe	Leu	Cys	Leu	Pro	Phe	Cys	Lys	Arg	Asp	Ala	Asp	Thr
	145				150					155					160
Ser	Leu	Gly	Gln	Thr	Leu	Thr	Ser	Ser	Cys	Ser	Leu	Ser	Ser	Ile	Leu
				165					170					175	
Val	Gly	Gly	Thr	Leu	Arg	Pro	Arg	Cys	Ser	Cys	Pro	Pro	Phe	Thr	Gln
			180					185					190		
Arg	Ser	Ala	Phe	His	Leu	Arg	Thr	Pro	His	Asn	Gln	Tyr	His	His	Gly
		195					200					205			
Ser	Thr	Ser	Leu	Ala	Ser	His									
	210					215									

<210> 2247  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2247

Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn



1	5	10	15
Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu	20	25	30
Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala	35	40	45
Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu	50	55	60
Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys	65	70	75
Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala	85	90	95
Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys	100	105	110
Lys Pro Cys Leu Lys Gln Thr Trp Gly Lys Gly Leu Arg Pro Ser Leu	115	120	125
Gln Lys Gln His Arg Ala Gly Trp Pro Pro Gly	130	135	

<210> 2248  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<400> 2248
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
1 5 10 15
Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
20 25 30
Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
35 40 45
Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu
50 55 60
Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys
65 70 75 80
Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
85 90 95
Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys
100 105 110
Lys Pro Cys Leu Lys Gln Thr Cys Met Lys Phe Tyr Ala Arg Val Cys
115 120 125
Arg Ser Ser Thr Gly Leu Val Gly His Gln Val Glu Glu Phe Leu Asn
130 135 140



Gly Thr Leu Leu Ile Ile Thr Ile Arg His Leu Val Thr Tyr Ile Ile  
 50 55 60  
 Val Ile Phe Lys Cys His Met Leu Lys Asn Glu Met Asn Ser Ser Ile  
 65 70 75 80  
 Lys Pro His Phe Gln  
 85

<210> 2250  
 <211> 184  
 <212> PRT  
 <213> Homo sapiens

<400> 2250  
 Met Lys Ala Leu Gly Ala Val Leu Leu Ala Leu Leu Leu Cys Gly Arg  
 1 5 10 15  
 Pro Gly Arg Gly Gln Thr Gln Gln Glu Glu Glu Glu Asp Glu Asp  
 20 25 30  
 His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu  
 35 40 45  
 Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg  
 50 55 60  
 Cys Tyr Thr Cys Lys Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr  
 65 70 75 80  
 Gln Asn Cys Ser His Gly Gln Thr Cys Thr Thr Leu Ile Ala His Gly  
 85 90 95  
 Asn Thr Glu Ser Gly Leu Leu Thr Thr His Ser Thr Trp Cys Thr Asp  
 100 105 110  
 Ser Cys Gln Pro Ile Thr Lys Thr Val Glu Gly Thr Gln Val Thr Met  
 115 120 125  
 Thr Cys Cys Gln Ser Ser Leu Cys Asn Val Pro Pro Trp Gln Ser Ser  
 130 135 140  
 Arg Val Gln Asp Pro Thr Gly Lys Gly Ala Gly Gly Pro Arg Gly Ser  
 145 150 155 160  
 Ser Glu Thr Val Gly Ala Ala Leu Leu Leu Asn Leu Leu Ala Gly Leu  
 165 170 175  
 Gly Ala Met Gly Ala Arg Arg Pro  
 180

<210> 2251  
 <211> 352  
 <212> PRT  
 <213> Homo sapiens

[illegible]

1512

Figure 1 shows a schematic diagram of a 1D chain of  $N$  sites. The chain is represented by a horizontal line with  $N$  sites labeled  $1, 2, \dots, N$ . Each site has a vertical line representing a spin, with a dot indicating the spin state. The chain is divided into two regions by a vertical line at site  $N/2$ . The left region is labeled 'Left' and the right region is labeled 'Right'. The chain is connected to a central vertical line labeled ' $N/2$ '.

```
<210> 2252
<211> 448
<212> PRT
<213> Homo sapiens
```

Val Val Gly Ala Ser Thr Pro Gly Thr Val Val Arg Leu Asn Lys Ala  
20 25 30

Leu Gln Val Thr Val Pro His Phe Leu Asp Trp Ser Gly Glu Ala Leu  
50 55 60

Gln Pro Thr Arg Ile Arg Ile Leu Asn Val His Val Pro Arg Leu His  
65 70 75 80

Leu Lys Phe Ile Ala Gly Phe Gly Val Arg Leu Leu Ala Ala Ala Asn  
85 90 95

Phe Thr Phe Lys Val Phe Arg Ala Pro Glu Pro Leu Glu Leu Thr Leu  
100 105 110

Pro Val Glu Leu Leu Ala Asp Thr Arg Val Thr Gln Ser Ser Ile Arg  
115 120 125

Thr Pro Val Val Ser Ile Ser Ala Cys Ser Leu Phe Ser Gly His Ala  
130 135 140

Asn Glu Phe Asp Gly Ser Asn Ser Thr Ser His Ala Leu Leu Val Leu  
145 150 155 160

Val Gln Lys His Ile Lys Ala Val Leu Ser Asn Lys Leu Cys Leu Ser  
165 170 175

Ile Ser Asn Leu Val Gln Gly Val Asn Val His Leu Gly Thr Leu Ile  
180 185 190

Gly Leu Asn Pro Val Gly Pro Glu Ser Gln Ile Arg Tyr Ser Met Val  
195 200 205

Ser Val Pro Thr Val Thr Ser Asp Tyr Ile Ser Leu Glu Val Asn Ala  
210 215 220





<210> 2255  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 2255  
 Met Leu Phe His Tyr Asp Trp Ile Ser Ile Pro Leu Val Tyr Thr Gln  
 1 5 10 15  
 Val Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly  
 20 25 30  
 Arg Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu  
 35 40 45  
 Leu Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met  
 50 55 60  
 Tyr Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Phe Tyr Ala Gly Trp  
 65 70 75 80  
 Leu Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp  
 85 90 95  
 Asp Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu  
 100 105 110  
 Leu Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp  
 115 120 125  
 Gln Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr  
 130 135 140  
 Ala Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu  
 145 150 155 160  
 Arg Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro  
 165 170 175  
 Gly Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg  
 180 185 190  
 Phe Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe  
 195 200 205  
 Gly Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg  
 210 215 220  
 Ala Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu Glu  
 225 230 235 240  
 Ser Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro  
 245 250

<210> 2256



```
<210> 2257
<211> 170
<212> PRT
<213> Homo sapiens
```

```

<400> 2257
Met Ile Ser Ile His Asn Glu Glu Glu Asn Ala Phe Ile Leu Asp Thr
  1             5             10             15
Leu Lys Lys Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe
                20             25             30
Tyr Asp Thr Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met
          35             40             45
Thr Phe Asp Lys Trp Thr Asp Gln Asp Asp Asp Glu Asp Leu Val Asp
          50             55             60
Thr Cys Ala Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn
  65             70             75             80
Cys Glu Val Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro
                85             90             95
Tyr Lys Arg Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu
                100             105             110
Val Ile Ala Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp
          115             120             125

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1517.

Phe Leu Tyr Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser  
130 135 140

Thr Ala Pro Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly  
145 150 155 160

Glu Glu Asn Glu Tyr Pro Val Gln Phe Asp  
165 170

<210> 2258

<211> 595

<212> PRT

<213> Homo sapiens

<400> 2258

Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val  
1 5 10 15

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val  
20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr  
35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe  
50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn  
65 70 75 80

Pro Ala Arg Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu  
85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg  
100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met  
115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser  
130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr  
145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro  
165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys  
180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro  
195 200 205

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Leu Gly  
210 215 220

[illegible]

Pro Pro His His Ala Pro Pro Ala Leu Ala Thr Pro Ser Pro Glu Glu  
545 550 555 560

Gly Glu Ile Gln Tyr Ala Ser Leu Ser Phe His Lys Ala Arg Pro Gln  
565 570 575

Tyr Pro Gln Glu Gln Glu Ala Ile Gly Tyr Glu Tyr Ser Glu Ile Asn  
580 585 590

Ile Pro Lys  
595

<210> 2259

<211> 274

<212> PRT

<213> Homo sapiens

<400> 2259

Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe  
1 5 10 15

Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val  
20 25 30

Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr  
35 40 45

Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu  
50 55 60

Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg  
65 70 75 80

Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser  
85 90 95

Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser  
100 105 110

Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro  
115 120 125

Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His  
130 135 140

Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val  
145 150 155 160

Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn  
165 170 175

Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn  
180 185 190

Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro  
195 200 205

His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser  
1520

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-210

215

220

Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp  
225. 230 235 240

Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly  
245 250 255

Arg Gln Tyr Val Lys Arg Thr Leu Val Ser Lys Val Arg Gly Ser Trp  
260 265 270

Ser Leu

<210> 2260

<211> 468

<212> PRT

<213> Homo sapiens

<400> 2260

Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp Ala  
1 5 10 15

Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu Asp  
20 25 30

Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe Ser  
35 40 45

Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser Phe  
50 55 60

Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg Arg  
65 70 75 80

Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly Leu  
85 90 95

Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys Glu  
100 105 110

Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu Gly  
115 120 125

Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro Thr  
130 135 140

Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser Arg  
145 150 155 160

Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Ala Thr Gly Ala  
165 170 175

Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly Glu  
180 185 190

Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly Gly  
195 200 205

1521

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Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala Ala  
 210 215 220

Ser Ala Arg Thr Ala Ala Glu Gly Glu Gly Thr Leu Glu Ser Glu Pro  
 225 230 235 240

Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser Trp  
 245 250 255

Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln Tyr  
 260 265 270

Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala Ser  
 275 280 285

Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr Asp  
 290 295 300

Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu Thr  
 305 310 315 320

Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala Ser  
 325 330 335

Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu Thr  
 340 345 350

Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr Val  
 355 360 365

Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro Leu  
 370 375 380

Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro Thr  
 385 390 395 400

Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg Ser  
 405 410 415

Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg Arg  
 420 425 430

Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly Leu  
 435 440 445

Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu Glu  
 450 455 460

Glu Ser Val Val  
 465

<210> 2261  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens  
 <400> 2261







Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly Ser  
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 Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser Arg  
 145 150 155 160  
 Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu Asn  
 165 170 175  
 Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn Thr  
 180 185 190  
 Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr  
 195 200

<210> 2265  
 <211> 253  
 <212> PRT  
 <213> Homo sapiens

<400> 2265  
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 Gly Pro Glu Glu Ala Ser Ser Glu Val Gln Asp Thr Asn Glu Val His  
 35 40 45  
 Val Pro Gly Asp Gln Asp Glu Pro Gln Thr Leu Gly Lys Lys Gly Ser  
 50 55 60  
 Lys Asn Asn Ile Ser Val Tyr Met Thr Leu Asn Gln Lys Lys Ser Asp  
 65 70 75 80  
 Ser Ser Ser Ala Ser Val Cys Ser Ile Asp Ser Thr Asp Asp Leu Lys  
 85 90 95  
 Ser Ser Asn Ser Glu Cys Ser Ser Ser Glu Ser Phe Asp Phe Pro Pro  
 100 105 110  
 Gly Ser Met His Ala Pro Ser Thr Ser Ser Thr Ser Ser Ser Lys  
 115 120 125  
 Glu Glu Lys Lys Leu Ser Asn Ser Leu Lys Met Lys Val Phe Ser Lys  
 130 135 140  
 Asn Val Ser Lys Cys Val Thr Pro Asp Gly Arg Thr Ile Cys Val Gly  
 145 150 155 160  
 Asp Ile Val Trp Ala Lys Ile Tyr Gly Phe Pro Trp Trp Pro Ala Arg  
 165 170 175  
 Ile Leu Thr Ile Thr Val Ser Arg Lys Asp Asn Gly Leu Leu Val Arg  
 180 185 190  
 Gln Glu Ala Arg Ile Ser Trp Phe Gly Ser Pro Thr Thr Ser Phe Leu  
 1525

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Gly	Tyr	Pro	His	Trp	Pro	Ala	Arg	Ile	Asp	Asp	Ile	Ala	Asp	Gly	Ala	
			20					25					30			
Val	Lys	Pro	Pro	Pro	Asn	Lys	Tyr	Pro	Ile	Phe	Phe	Phe	Gly	Thr	His	
		35					40					45				
Glu	Thr	Ala	Phe	Leu	Gly	Pro	Lys	Asp	Leu	Phe	Pro	Tyr	Asp	Lys	Cys	
	50					55					60					
Lys	Asp	Lys	Tyr	Gly	Lys	Pro	Asn	Lys	Arg	Lys	Gly	Phe	Asn	Glu	Gly	
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Leu	Trp	Glu	Ile	Gln	Asn	Asn	Pro	His	Ala	Ser	Tyr	Ser	Ala	Pro	Pro	
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Pro	Val	Ser	Ser	Ser	Asp	Ser	Glu	Ala	Pro	Glu	Ala	Asn	Pro	Ala	Asp	
			100					105					110			
Gly	Ser	Asp	Ala	Asp	Glu	Asp	Asp	Glu	Asp	Arg	Gly	Val	Met	Ala	Val	
		115					120					125				
Thr	Ala	Val	Thr	Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu	Ser	Asp	Ser	
	130					135					140					
Asp	Ser	Asp	Lys	Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg	Lys	Thr	Pro	
145					150					155					160	
Ala	Leu	Lys	Met	Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala	Ser	Ser	Asp	
				165					170					175		
Leu	Asp	Gln	Ala	Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn	Ser	Glu	Ser	
			180						185				190			
Ser	Ser	Glu	Ser	Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr	Pro	Glu	Lys	
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1526

[illegible]

<211> 281

<213> Homo sapiens

Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu Leu  
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Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val Gln Gly  
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Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser Pro Pro Asp  
35 40 45

His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr Arg Pro Ser Gln  
50 55 60

Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg Cys Cys Asp Pro Gly  
65 70 75 80

Thr Ser Met Tyr Pro Ala Thr Ala Val Pro Gln Ile Asn Ile Thr Ile  
85 90 95

Leu Lys Gly Glu Lys Gly Asp Arg Gly Asp Arg Gly Leu Gln Gly Lys  
100 105 110

Tyr Gly Lys Thr Gly Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys  
115 120 125

Gly Gln Lys Gly Ser Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His  
130 135 140

Tyr Ala Ala Phe Ser Val Gly Arg Lys Lys Pro Met His Ser Asn His  
145 150 155 160

Tyr Tyr Gln Thr Val Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp  
165 170 175

His	Phe	Asn	Met	Phe	Thr	Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu
			180					185					190		
Tyr	Phe	Phe	Ser	Leu	Asn	Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr
			195				200					205			
Leu	His	Ile	Met	Lys	Asn	Glu	Glu	Glu	Val	Ala	Ile	Leu	Phe	Ala	Gln
	210					215					220				
Val	Gly	Asp	Arg	Ser	Ile	Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu
225					230					235					240
Arg	Glu	Gln	Asp	Gln	Val	Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu
				245					250					255	
Asn	Ala	Ile	Phe	Ser	Glu	Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly
			260					265					270		
Tyr	Leu	Val	Lys	His	Ala	Thr	Glu	Pro							
		275					280								

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